



WAVE INFORMATION STUDIES OF US COASTLINES

WIS REPORT 20

SOUTHERN CALIFORNIA HINDCAST WAVE INFORMATION

by

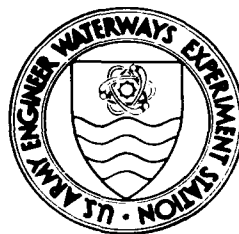
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Coastal Engineering Research Center

DEPARTMENT OF THE ARMY

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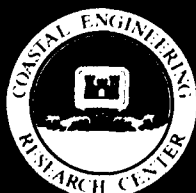
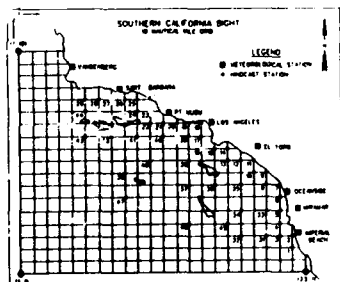
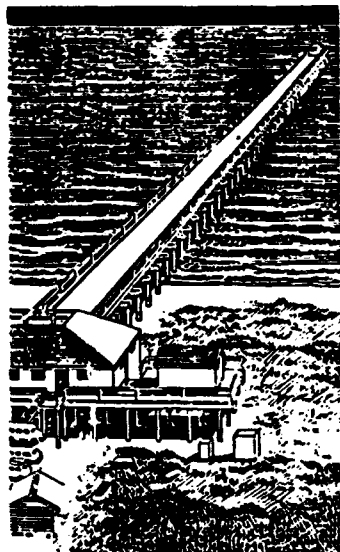


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13. ABSTRACT (Maximum 200 words) Wave information is summarized at 29 stations near the southern California coast from Point Conception to the Mexican border. The wave information is obtained from a 20-year hindcast using meteorological information over the North Pacific and the southern California region for the period 1956 to 1975. The wave climatology in the area is summarized by (a) tables of percent occurrence of wave height, period, and direction, (b) tables of yearly mean and maximum wave height, (c) wave rose diagrams, and (d) return period wave heights for each station. The wave information from the hindcast period is compared to wave measurements at nearby locations for differing time periods, to measurements at two locations coincident in time, and to previous wave hindcasts in the area, in order to validate the results of the present study.				
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PREFACE

The Wave Information Study (WIS) was authorized by Headquarters, US Army Corps of Engineers (HQUSACE) in 1976 at the US Army Engineer Waterways Experiment Station (WES) to produce a wave climatology for US coastal waters. The WIS is part of the Coastal Field Data Collection Program managed by the WES Coastal Engineering Research Center (CERC). The WIS Project Manager is Dr. J. M. Hubertz, the Program Manager during the study was Mr. J. M. Hemsley, and is now Ms. C. M. Holmes. The HQUSACE Technical Monitor is Mr. John H. Lockhart.

This report, the 20th in a series, presents wave information along the southern California coastline. A previous report, WIS Report 17, presents similar information along the remainder of the US west coast north of this area. Application of a numerical wave model to this geographic area and calculation of the hindcast data were done by Dr. R. E. Jensen with the assistance of Mses. R. D. Reinhard and B. J. Borup. Mr. David B. Driver prepared and ran special hindcasts of Southern Hemisphere swell. Dr. J. M. Hubertz prepared the report with the assistance of Mses. W. A. Brandon, R. D. Reinhard, J. B. Payne, R. M. Brooks, D. S. McAneny, and Mr. W. D. Corson. Dr. E. F. Thompson made the comparisons between previous hindcasts and wave measurements with the help of Ms. Beverly Green. Dr. Don Resio of Offshore & Coastal Technology Inc. provided the methods to include land-sea breeze effects and diffraction effects around islands. Dr. C. L. Vincent provided technical support throughout the study.

The study was conducted under the direct supervision of Drs. E. F. Thompson, Chief, Coastal Oceanography Branch (COB), CERC, J. M. Hubertz, Acting Chief, COB, Martin Miller, Chief, COB, and Mr. H. L. Butler, Chief, Research Division, CERC; and under the general supervision of Dr. J. R. Houston and Mr. C. C. Calhoun, Jr., Director and Assistant Director, CERC, respectively. The word processing of this report was done by Mses. V. L. Edwards and Jane Stauble, COB. The report was edited by Ms. Janean Shirley, Information Technology Laboratory, Information Products Division, WES.

At the time of publication of this report, Director of WES was Dr. Robert W. Whalin. Commander was COL Leonard G. Hassell, EN,

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CONVERSION FACTORS, NON-SI TO SI (METRIC) UNITS OF MEASUREMENT

Non-SI units of measurement used in this report can be converted to SI (metric) units as follows:

<u>Multiply</u>	<u>By</u>	<u>To Obtain</u>
degrees (angle)	0.01745329	radians
miles (US nautical)	1.852	kilometers
miles (US statute)	1.609347	kilometers

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PART I: INTRODUCTION

1. Wave information off the west coast of the United States is summarized in a number of Wave Information Studies (WIS) reports. The WIS Report 14 (Corson et al. 1986) presents Phase I estimates, WIS Report 16 (Corson et al. 1987) presents Phase II estimates, and WIS Report 17 (Jensen, Hubertz, and Payne 1989) presents Phase III estimates for the coast north of Point Conception. Phases I, II, and III are designations of the type of hindcast and are described in the reports above. This report presents hindcast wave information for the region south of Point Conception to the Mexican border. The hindcast period is the same as the studies above, namely 1956-1975. The spacing of stations along the coast where information is available is similar to the Phase III study, approximately 10 nautical miles*. The type of hindcast performed, however, is quite different from the Phase III approach used to the north.

PART II: METHODOLOGY

2. The Southern California Bight hindcast study addressed a number of sources of wave energy and local effects that control the wave climate. These include: northern Pacific swell, east Pacific wind fields and associated waves, localized effects such as sheltering and diffraction by islands, and meso-scale meteorological systems such as land-sea breezes. Swell originating to the south of the modeled region from tropical storms or hurricanes off the Mexican coast or in the Southern Hemisphere is not included in the hindcast information. The WIS Report 21 (Tracy and Hubertz 1990) provides hindcast wave information from hurricanes off the Mexican coast. No hindcast wave information is presently available for Southern Hemisphere winter storms.

3. The hindcast is divided into three parts; wind field generation over the study area (synoptic scale and meso-scale), northern Pacific wave energy at the seaward boundary of the study area, and localized Southern California Bight wave generation from the winds over the study area.

Wind Field Generation

4. One of the most important factors governing the estimation of a wave climate is the critical assessment of the winds in the study area. Both the synoptic-scale and meso-scale effects contribute to the generation of the wave field. Synoptic-scale winds were generated from gridded surface pressure fields (Holl and Mendenhall 1971). Geostrophic, to gradient, to near surface wind conditions were computed from techniques described in Resio, Vincent, and Corson (1982). Calculations of surface wind fields were made in a coordinate system that consisted of great circle paths that included much of the northern Pacific Ocean Basin (Figure 1).

*A table of factors for converting non-SI units of measurements to SI (metric) units is presented on page 3.

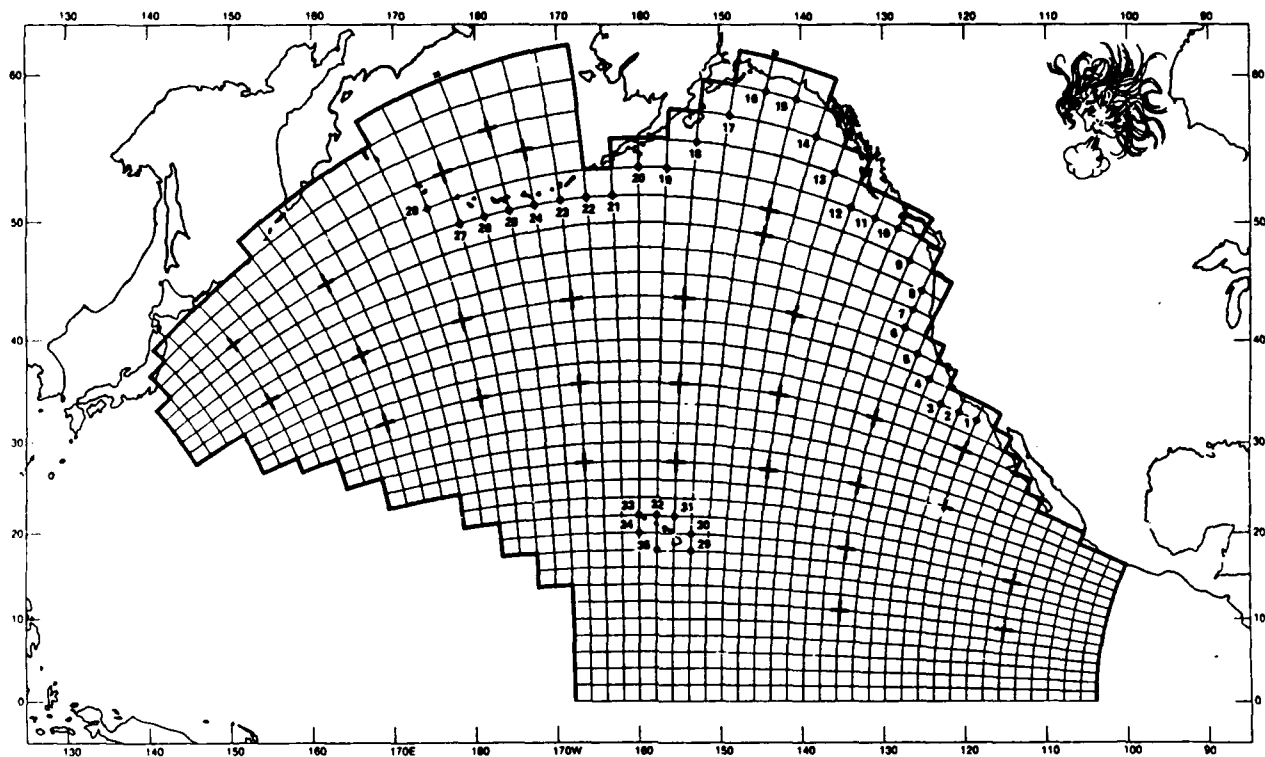


Figure 1. WIS Phase I grid for the North Pacific
(2-deg Mercator projection)

5. The coastal wind pattern along the Southern California Bight is affected by a land-sea breeze pattern. A variation in flow is caused by the heating of the land surface during the day and cooling during the evening. Historical evidence has suggested that the land breeze (blowing from land to sea) is strongest in the winter months and the sea breeze is strongest in the summer. Eight land-based meteorological stations along the Southern California Bight were used to evaluate the land-sea breeze effect (Figure 2). The data sets spanned the period from 1956-1975 (hourly observations from 1956-1965, and 3-hr observations from 1965-1975) beginning at 00:00 Greenwich Mean Time (GMT) on 1 January 1956. Although gaps in the records appeared with a certain amount of regularity, they were not detrimental to the analysis outlined below. The land-based meteorological data showed that the synoptic-scale winds, derived from the oceanic surface atmospheric pressure fields, were not the only factor governing local wind fields. Synoptic-scale wind

variations normally occur over days, whereas the land-based station data indicated significant variation over several hours. These variations were assumed to be a result of the land-sea breeze effect.

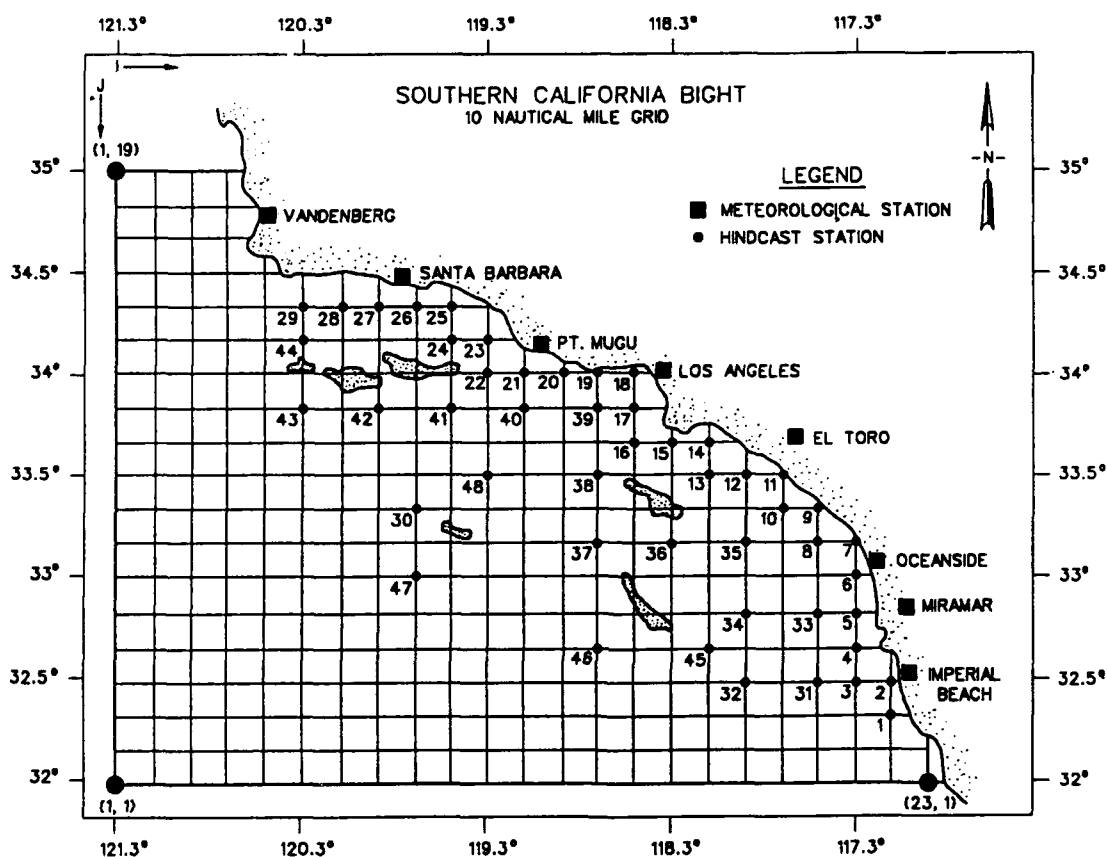


Figure 2. Southern California Bight Study
10-nautical-mile grid

6. A procedure was sought to incorporate the land-based winds into the synoptic-scale winds to account for the land-sea breeze, which varied in magnitude from 0 to 5 m/sec. The requirements were that the solution be time-dependent and statistically representative of the physical phenomena.

7. The spatial and temporal variation (on a daily, monthly, and yearly basis), intensity, lateral extent, triggering mechanisms, and overall contribution of the land-sea breeze effect to the synoptic-scale winds were considered. A simple approach of decoupling the winds into X and Y components was used to describe the land-sea breeze pattern. This approach was independent of all other physical properties and is given by Equations 1

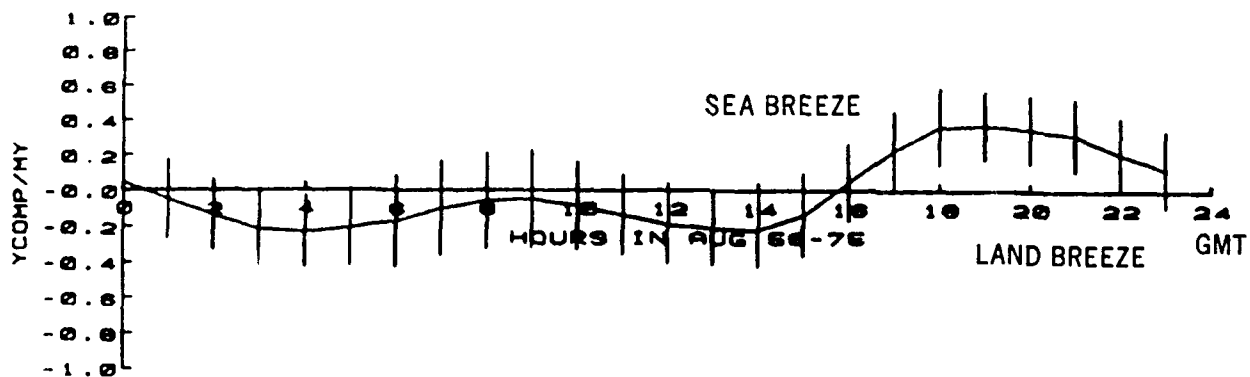
and 2. The months of February, May, August, and November were selected as the baseline for the analysis (2 months in an intense land-sea breeze regime (February and August) and 2 months (May and November) during a non-land-sea breeze time period). Time histories for each station were resolved into X and Y components. The components were scaled according to the maximum displacement occurring in any given 24-hr period (Figure 3).

$$X'(t) = \frac{WS(t) \cdot \cos WD(t) - \bar{X}}{M_x} \quad (1)$$

$$Y'(t) = \frac{WS(t) \cdot \sin WD(t) - \bar{Y}}{M_y} \quad (2)$$

where

- WS(t) = hourly or 3-hr wind speed at the 10-m elevation
- WD(t) = wind direction (mathematical coordinate system)
- \bar{X} = mean X component signal for all 24-hr periods in a month
- \bar{Y} = mean Y component signal for all 24-hr periods in a month
- M_x = maximum X displacement in the 24-hr period
- M_y = maximum Y displacement in the 24-hr period
- $X'(t)$ = response function for the X component of the wind
- $Y'(t)$ = response function for the Y component of the wind



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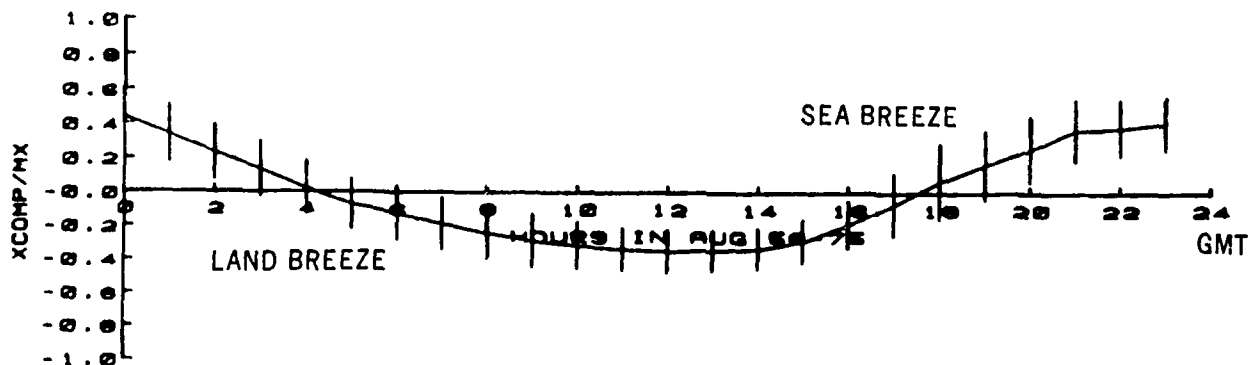
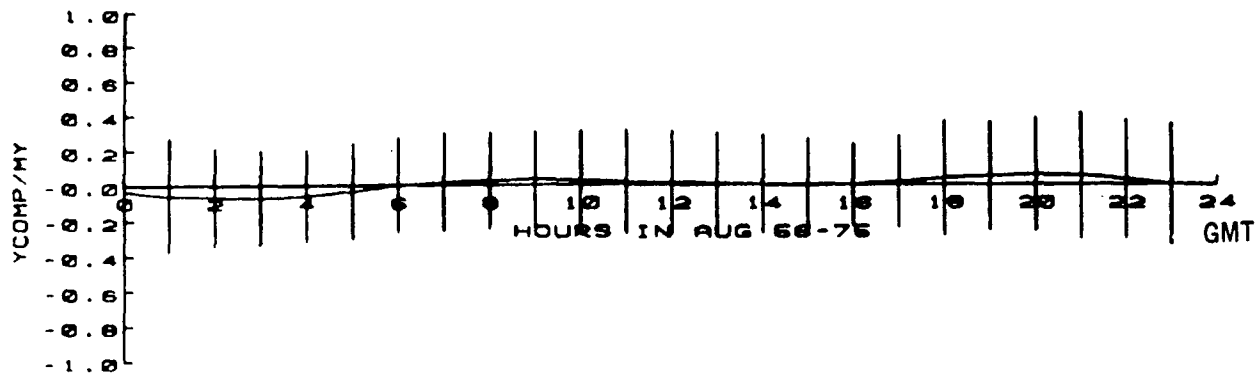


Figure 3. $X'(t)$ and $Y'(t)$ average response function for land station wind information mean conditions for all Januarys, 1956-1975. Vertical lines represent one standard deviation (Continued)



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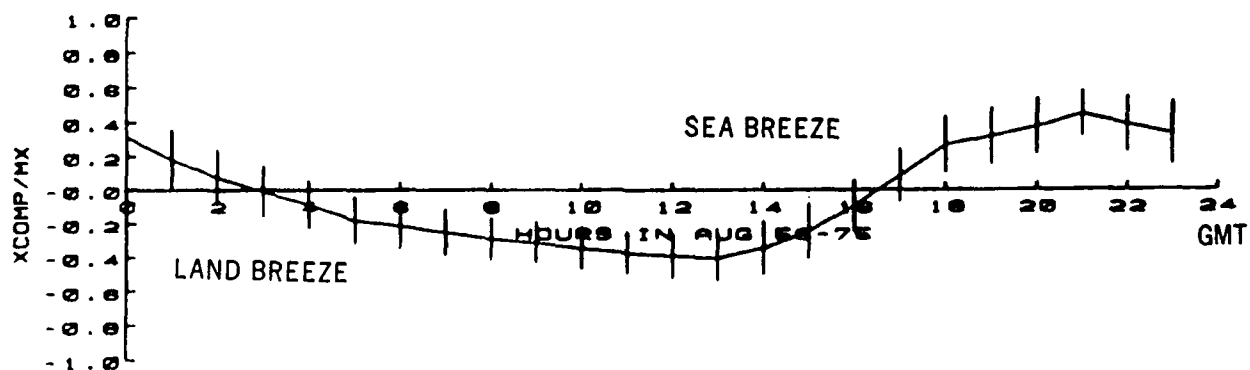


Figure 3. (Concluded)

8. The trends in the mean response function for all stations were well established, although the variance about the mean signal was large in magnitude. This was further verified through an analysis of the actual deviations from the mean response. The deviations closely approximated a normal distribution. It was concluded that the variations from the mean response could be accounted for by simple random noise that was amplified by the nondimensional scaling. This procedure was followed for all eight stations and similar trends were displayed indicating that land-sea breeze effects are evident over the entire Southern California Bight. Changes in angles from one site to the next are primarily caused by changes in the shoreline orientation. For example, Imperial Beach displayed a periodic displacement in the east-west direction, winds from Los Angeles varied more northeast-southwest, and at Point Mugu a well-defined southwesterly component was observed. The additional physical parameters governing the land-sea breeze effect such as wind speed, wind direction, cloudiness, and air-sea temperature differences were assumed to be of lower order and thus neglected. The remaining 8 months were similarly analyzed and response functions (dimensionless hourly averaged $X'(t)$ and $Y'(t)$ components) defining the land-sea breeze at the eight station locations were developed.

9. The land-sea breeze effect was directly related to the shoreline orientation, so a new orthogonal coordinate system (based on a logarithmic fit to the shoreline) was used. This made the alongshore interpolation between the eight locations easier and also simplified the calculations of the land-sea breeze extent in the offshore direction. It was assumed that the maximum offshore extent of the land-sea breeze was 20 nautical miles. Weighting functions were generated for spatial interpolation and also for temporal interpolation relating phase differences between the stations. A mapping routine was generated to relate the shoreline-normal grid to the original (X,Y) grid (or I,J grid) shown in Figure 2.

10. The procedures thus far have dealt with the generation of a statistically sound model that reproduces the land-sea breeze along the entire Southern California Bight. We have established average response functions ($X'(t)$ and $Y'(t)$) for each station for each month. A 20-year time history (1956-1975) at the eight locations was used to evaluate the daily X and Y maximum displacements (M_x and M_y) and the values were tabulated. Also, a

correlation coefficient was computed relating the daily response functions (in X and Y) to the mean functions. This correlation coefficient was used to determine if that particular day represented a land-sea breeze day.

11. The procedure to combine the synoptic-scale winds with the land-based meteorological data is given by

$$W(I,J) = \lambda \cdot W_{syn}(I,J) + (1 - \lambda) \cdot W_{lnd}(I,J) + \epsilon \cdot W_{lnd}(I,J) \quad (3)$$

where

- $W(I,J)$ = blended wind condition at point (I,J)
- $W_{syn}(I,J)$ = synoptic-scale wind at (I,J)
- $W_{lnd}(I,J)$ = land-based wind condition at (I,J)
- λ = weighting function relating the spatial variation between the land and synoptic scale wind for non-land-sea breeze days
- ϵ = weighting function for the land-sea breeze effect, related to the correlation coefficient for the day, and to the temporal variation in offshore extent

12. Two important factors are evident in Equation 3. The land-sea breeze effect is an additive effect superimposed on the synoptic-scale wind conditions and this equation retains the characteristics of the land station information. The triggering of the land-sea breeze effect was based on the precomputed daily correlation coefficient at each station location. From the analysis, a correlation coefficient equal to or greater than 0.6 was selected to identify a land-sea breeze day.

13. Synoptic-scale wind fields derived from the WIS Phase I deepwater wave hindcast were input every 3 hr on a 2-deg spherical orthogonal grid. That information was spatially interpolated to a 10-nautical-mile grid (Figure 2) and linearly interpolated to a 1-hr time step. Measured wind conditions from the eight land-based stations were accessed as well as all pre-computed statistical quantities. The correlation coefficient was checked each day to determine if a land-sea breeze day was present at that particular location. If so, λ was set to 1.0, and the land-sea breeze was generated based on the synthesis of the daily observations and the mean response function. The temporal interpolation weights were systematically used, covering the 24-hr period. If the meteorological station data indicated that the land-sea breeze

effect was not in effect, then the wind speeds were simply blended ($\epsilon = 0$), and based only on spatial weighting.

14. Unfortunately, few data exist to verify the methods employed in this approach. Ship observation information was available but was limited by the accuracy of the location. Simulated time series were used to check the procedures. The procedure performed adequately for all cases. The Vandenberg site, outside of the Bight, consistently represented the land-sea breeze effect for a shoreline orientation in a north-south direction, rather than an east-west direction. Since this was not representative of the Bight, the Vandenberg information was deleted from the procedure.

Forced Two-Dimensional Spectral Boundary Condition

15. The contribution of northern Pacific storm systems to the wave climate in the Southern California Bight at the required resolution can be calculated by two methods. The first method is to hindcast the entire Pacific Ocean Basin using the same grid spacing employed in the study area (10 nautical miles). This method becomes computationally prohibitive and cost prohibitive because of the geographic extent and duration of the hindcast. The second method employs successively smaller scale grids over portions of the ocean and uses the results of the larger grids to drive the smaller grids. This method optimizes computational time in lieu of resolving details not required in each gridded area. The nested-grid method was adopted in this study.

16. The WIS generated a 20-year wind-wave hindcast derived from historical surface pressures and measured wind data for the northern Pacific Ocean Basin (Figure 1). A discrete spectral wave model was used to generate the wave conditions (Resio 1981). Output information consists of two-dimensional (frequency/direction) spectral estimates every 3 hr for the period 1956-1975 (Corson et al. 1986). Twenty frequencies (from 0.03 to 0.22 Hz) and sixteen direction bands (at 22.5-deg intervals) were used to approximate the frequency/direction spectra. Two-dimensional spectra from stations 1-4 of the Phase I WIS study (Figure 1) were used to drive the open boundary in the Southern California Bight hindcast study. Additional spectral estimates from the Phase II WIS study (based on a 0.5-deg grid) supplemented areas between

the original 2-deg information (Corson et al. 1987).

Southern California Bight Hindcast

17. An arbitrary water depth, pseudo-discrete, spectral wave model, SHALWV (Hughes and Jensen 1986) was employed in the 20-year hindcast study using the aforementioned wind fields and spectral boundary conditions as input. The theoretical framework relies on four fundamental assumptions:

- a. The total momentum flux from the atmosphere to the water surface is approximately constant and independent of the water depth.
- b. The partitioning of this momentum into the current field and wave field is approximately constant and independent of the water depth.
- c. The spectral shape of the waves being generated is approximately constant in wave number space and is independent of the water depth.
- d. Wave-wave interactions are the primary mechanism by which wave energy is transformed to the forward face of the spectrum.

Spectral energy is stored in a discrete matrix of frequency and direction bands for each computation point but the sources and sinks in the energy balance equation associated with energy input, transfer, and dissipation are parameterized.

18. The homogeneous portion of the radiative transfer equation is solved first. All steady-state mechanisms and associated parameters (such as the ray trajectory equation for refraction and shoaling mechanisms) are pre-computed and stored for later use, hence reducing the numerical calculation to a single propagation step in time. Wave energy in each discrete frequency-direction band (Tables 1 and 2, respectively) is propagated independently using a first-order upstream differencing scheme. This is a step-wise solution that estimates the change in energy level and direction along the wave ray that is capable of propagating into the grid point in one time step. The effects of island sheltering and diffraction were estimated at this time.

19. The offshore islands were resolved in the 10-nautical-mile grid as land points. No energy was allowed to propagate through these land points.

Since many islands are irregular in shape or relatively small compared to the 10-nautical-mile grid spacing, a method was developed to include spectral energy sheltering. The method of solution is sub-scale modeling of these features embedded in the 10-nautical-mile grid. A series of coefficients were generated that represent the percentage of energy in an angle band allowed to reach a grid point. The coefficients were determined via graphical means. Only points adjacent to island grid points were considered.

20. Energy propagating toward a point directly behind an island may be geometrically sheltered by an island but some of the energy may reach the shadow region by refraction and or diffraction. Island diffraction is approximated in SHALWV based on the approach of Penny and Price (1944) for breakwaters. This method applies Sommerfield's solution for diffraction of light waves at the edge of a semi-infinite screen to water wave diffraction at the edge of a semi-infinite breakwater, or in this case, an island. The method is based on:

- a. Linear wave theory and the principle of linear superposition in the spectral version.
- b. Uniform water depth.
- c. Semi-infinite breakwater.
- d. Complete reflection off the breakwater.

Only the effects of diffraction in the lee of the island are considered in this application. Diffractive effects are applied only to energy that has been sheltered. Thus, the process adds back a percentage of the energy that was initially lost due to sheltering.

21. After the propagation sequence, energy is added to or removed from each discrete energy band by the source terms. These source/sink mechanisms consist of wind-wave growth, nonlinear wave-wave interactions, high-frequency dissipation, and surf-zone breaking (Jensen 1987). At the end of each time step (600 sec for this study), the directional spectrum at each grid point is calculated as the sum of the independently propagated spectral elements and the changes in energy caused by the source/sink mechanisms. This sequence was followed for the 20-year period (1956-1975) in 2-month intervals with provisions for continuity between runs. This ensured continuous simulation of the wave environment without loss in energy levels from one run to the next. Actual run time for a 2-month simulation was approximately 50 min on a CRAY 2

computer. The latitude and longitude of each station and the depth at the station are shown in Table 3.

22. In this study, an attempt has been made to represent prototype conditions. The user is cautioned, however, that bathymetric and coastline features on the order of 10 nautical miles or less are not represented in the simulation. If such features are present near a station and indeed affect the local wave climate, the model results will not reflect these effects.

PART III: VERIFICATION

23. Wave conditions along the southern California coast, south of Point Conception, are unusually complex. Numerous large and small offshore islands and shoals affect local wave climate. Wave energy arrives from three major sources: winter storms in the North Pacific Ocean; tropical storms in the eastern Pacific south and west of southern California; and intense storms in the Southern Hemisphere in the vicinity of New Zealand, Australia, and the Indian Ocean. An additional source of wave energy is local winds within the Southern California Bight.

24. Because of the complexities associated with hindcasting waves off the southern California coast, verification of the hindcast with measurements is especially critical. Wave gage measurements are available from several long-term field measurement programs for a number of locations in southern California. Therefore, this study included an extensive comparison between the hindcast wave information and gage data. Offshore gage data are compared to WIS estimates in Appendix A, and nearshore gage data are compared to WIS estimates in Appendix B. Appendix C contains a time series comparison of gage data to WIS estimates.

Description of Measurements

25. The Headquarters, US Army Corps of Engineers operated a field program during the 1940's to the mid 1970's. The program covers about the same time period as the hindcast. However, technology available for collecting and analyzing wave data during much of the program has been surpassed in more recent programs. Limitations are detailed by Thompson (1977). Only digitally analyzed data from a continuous wire staff gage at Huntington Beach and a pressure gage at the Channel Islands are available and considered suitable for comparison to the hindcast. The gage locations are shown in Figure 4 and details including coordinates and water depth are given in Table 4. Significant wave height (H_s) or more explicitly, energy-based wave height (H_{m0}) (see Thompson and Hubertz (1991) for a more detailed explanation) is estimated as four times the standard deviation of surface elevations. Peak

period corresponds to the frequency of the band with the largest energy in the energy spectrum.

26. More recently, the US Army Corps of Engineers and the State of California Department of Boating and Waterways have jointly supported a network of wave gages operated by the Scripps Institution of Oceanography, La Jolla, CA. This project is called the Coastal Data Information Program (CDIP). The network began in 1976 and has continued to the present. Nearshore measurements are collected with submerged pressure gages. Offshore measurements are generally collected with small accelerometer buoys. Monthly and annual reports are routinely produced as part of the program (Seymour, Castel, and Thomas 1989). As with the Corps program, parameters summarized include energy-based wave height and period of maximum energy density.

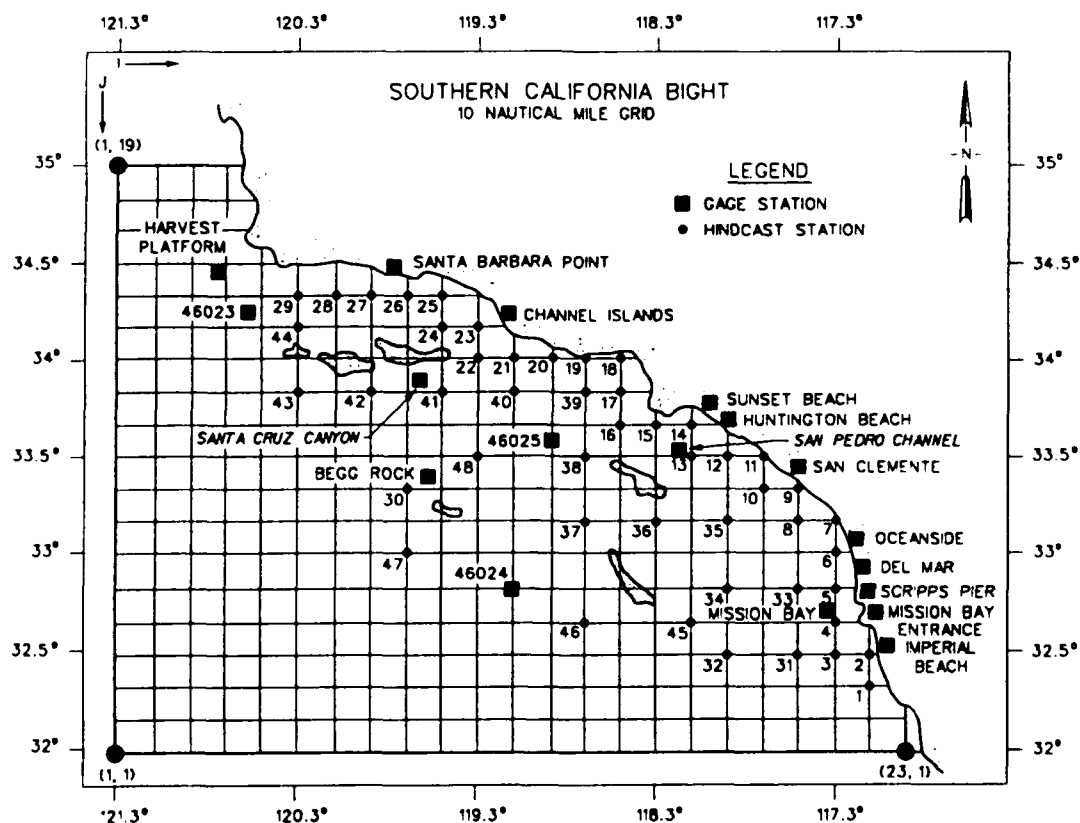


Figure 4. Gage and hindcast locations

27. Since CDIP does not overlap the hindcast time period, the measurements can only be compared to the hindcast in terms of climate. At least

three reasonably complete years of wave data are desirable to give a good estimate of the climate; however, even one complete year can give useful information for the lower, commonly occurring wave conditions (Thompson and Harris 1972).

28. Three or more reasonably complete years of data are available from all of the nearshore CDIP gages in southern California. Years with a data retention rate of at least 90 percent were accepted. Less severe criteria were needed for the offshore CDIP gages because of the increased propensity for gage damage, data transmission loss, and more difficult logistics for gage repair. Offshore data were accepted if the observations were reasonably numerous and evenly distributed through the year so that no significant bias would be expected. Only one offshore gage collected three or more acceptable years of data. The CDIP gages used for comparison with the hindcast are shown in Figure 4 and listed in Table 4.

29. The National Data Buoy Center (NDBC) of the National Oceanic and Atmospheric Administration has operated an offshore buoy measurement program since the mid 1970's. These buoys are equipped to measure a variety of environmental parameters including waves. Wave parameters reported include energy-based significant height and, since 1979, period of maximum energy density. The presently stated accuracy is ± 0.2 m, or 5 percent for wave height and ± 1 sec for period. Climatic summaries for stations with at least 3 years of data are given by Gilhousen et al. (1990).

30. Three NDBC buoys are suitable for comparison with the southern California hindcast, as listed in Table 4 and shown in Figure 4. Station 46023, after April 1983, and Station 46024 were discus hulls 10 m in diameter. Station 46023, prior to April 1983, and Station 46025 were boat-shaped hulls 6 m long and 3 m wide. Station 46024 was modified to give directional wave data between April 1984 and October 1985.

Modification of Hindcast Wave Information

31. The wave information in this report requires some modification to be directly comparable to measurements. The modifications consist of adding a southern swell component and, in some cases, spatial transformation to gage sites. Swell wave energy from two significant sources is not included in the

statistical summaries of WIS results in Appendix D. The two sources are winter storms in the Southern Hemisphere and tropical storms north of the equator, typically off the Mexican coast. Both sources are most active during the Northern Hemisphere summer. Swell from the Southern Hemisphere was not included because wind information in the area was not accurate enough to produce an acceptable wave hindcast. Swell from hurricanes to the south is characterized in WIS Report 21 (Tracy and Hubertz 1990).

32. Data on southern swell were obtained from directional wave spectra at NDBC Station 46024. Spectral components were selected within the direction range of 135-225 deg true north and frequencies less than or equal to 0.14 Hz. These truncated spectra were input to the seaward boundary of a 5-nautical-mile grid comparable to the grid in Figure 4 but with grid elements half as large. A steady state spectral wave propagation model (Resio 1988) was configured for high resolution in the needed ranges of frequency and direction, and the southern swell spectra were propagated and saved at the WIS stations indicated in Figure 4. A significant wave height was derived from the total energy of the selected components and peak period corresponds to the highest peak of the frequency spectrum.

33. The above procedure provided approximately 18 months of estimated southern swell information (April 1984-October 1985). Since southern swell is often negligible during the winter months, the information essentially covers 2 years of activity. Information from 1985 was used to complete the missing days in 1984. Similarly, 1985 was expanded to a full year using 1984 information.

34. The southern swell information derived by the above procedures represents only 2 years, and both years are outside the years represented by the WIS database. However, the information can be interpreted as an indicator of the southern swell climate and can be used in forming climatological summaries. For verification purposes, the two southern swell years were repetitively paired with years in the WIS database to form a 20-year database that includes southern swell. Significant heights for sea and swell components of the wave spectrum were calculated for the 20-year hindcast. These were combined with the significant height of southern swell by taking the square root of the sum of squared heights for the three wave components (local-generated wind sea, swell generated in the North Pacific, and swell

generated in the South Pacific). Peak period and mean direction correspond to the wave component with the largest height.

35. Waves in shallow water can be strongly affected by changes in the water depth. All hindcast summary points are in deeper water than the near-shore gages listed in Table 4. Some modification of the hindcast information to account for the difference in water depths is necessary before meaningful comparisons can be made. However, the modification raises additional uncertainties about the comparisons, and therefore, the shallow-water comparisons should be considered less definitive than the deepwater comparisons.

36. Nearshore gages were paired with nearby hindcast stations as detailed in Table 5. The Imperial Beach and Scripps Pier gages were omitted because of the highly irregular bathymetry at those sites. Hindcast estimates were transformed to the gage depth using a modified version of the Phase III method described by Jensen (1983). The Phase III method is designed to economically model principal elements of shallow-water transformation. Straight, parallel bottom contours with uniform offshore slope are assumed. Sheltering of waves by large-scale coastal features not incorporated in the hindcast grid is subjectively included. No additional energy sources between the hindcast and gage locations are considered. Water level variations due to storm surge and tides are not included.

37. Locally generated wind sea is treated as a spectrum of energy with directional spread given by cosine to the fourth power. The Texal, Marsden, Arsloe (TMA) spectral form (Bouws et al. 1985) is used to estimate the frequency spread for all water depths. Swell generated in the North Pacific is also treated as a TMA spectrum with directional spread given by cosine to the eighth power. The theoretical basis for the TMA spectrum applies only to sea; however, there is evidence the TMA form reasonably approximates shallow swell as well (Hughes 1984). Southern swell is treated as a monochromatic wave train.

38. The three wave components (locally generated wind sea, wave energy generated in the North Pacific, and swell generated in the South Pacific) are transformed independently to the gage depth. Significant height (energy-based H_{mo}) is computed as the square root of the sum of the squared heights of the components. The dominant period is taken as the period of the component with the largest significant height.

39. Parameters used for Phase III transformation are given in Table 5. The shoreline orientation parameter is an estimate of the general orientation of the shallow-water bottom contours between the hindcast stations and gage locations. The shoreline orientation is reasonably well defined for locations listed. Sheltering was estimated by simple straight-line shadowing of the gage location by local coastal features. Sheltering is expressed using the Phase III direction convention shown in Figure 5. Sheltering at Del Mar is due to Point La Jolla. Sheltering at Huntington Beach and Sunset is from Point Fermin and Point Vicente. Sheltering is constrained to even increments of 10 deg.

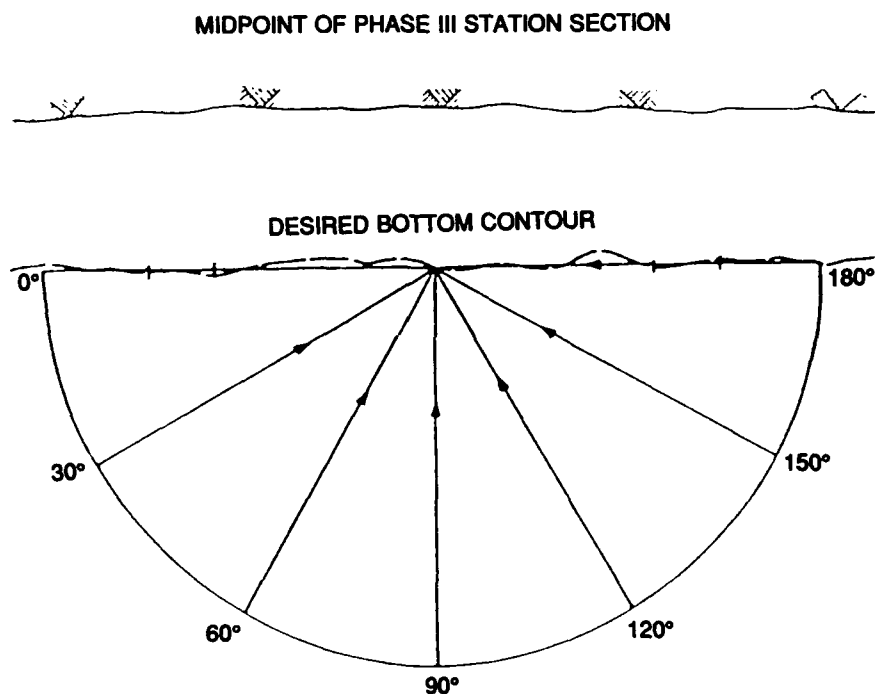


Figure 5. Coordinate system defining the direction of wave propagation

Comparison to Measurements

40. Mean and percent occurrence statistics were computed for the hindcast and gage information. Means are summarized in Table 6. Percent

occurrence plots are given in Appendixes A and B. Intervals in the hindcast percent occurrences were chosen to match the CDIP and NDBC gage intervals. Percent occurrence values were not adjusted for different interval widths. Supplementary information including years and number of observations of gage data are given on each plot. The shortest CDIP gage periods are at 5 sec but dummy points are plotted with 0 percent occurrence at 1 and 3 sec to match WIS.

41. The period percent occurrence plots require further explanation. Periods from the CDIP gages represent the highest peak of a fine resolution energy spectrum. They are reported in 2-sec intervals, but are chosen from essentially a continuum of possible period values, even in the low frequency portion of the spectrum where resolution in period often deteriorates. The hindcast periods at the lower frequencies are constrained to discrete values at which the model operates. The values used in this hindcast are summarized in Table 1. When the hindcast period information is summarized in 2-sec intervals, the discrete values are distributed unevenly among the intervals. This can lead to a small distortion in the percent occurrence plots. For example, the 10- to 12-sec interval contains two discrete values (10.0 sec and 11.1 sec) while the adjacent 12- to 14-sec interval contains only one value (12.5 sec). Thus, the hindcast percents tend to be somewhat inflated in the 10- to 12-sec period range.

42. Another consideration with the period comparisons is that the hindcast period does not strictly correspond to the highest spectral peak. Periods for the local sea, energy of North Pacific origin, and southern swell wave components correspond to the highest peak of the portion of the spectrum assigned to each component. For the offshore gages, the peak period of the local sea and North Pacific component is matched to either the sea or swell. The total energy of that wave component is then compared to the energy of the southern swell. If the southern swell energy is greater, the southern swell period and direction are taken as the peaks. Otherwise the peak period and direction of the local sea, North Pacific source, are taken. This approach may give a small bias favoring sea period over southern swell period. Since wind-sea is less common than swell in the region and wind-sea is more prominent in different seasons than southern swell, the bias is expected to be inconsequential.

43 Different considerations apply to periods from the nearshore hindcast. Each wave component is modified during transformation and the spectrum is not reconstructed at the gage depth in the Phase III approach used for these verifications. The procedure for selecting a period based on the wave component with the greatest total energy would tend to favor the sea because it is characterized by a broad spectral peak. However, this tendency is at least partially counterbalanced by the tendency for swell to become relatively more dominant as water depth decreases. Evidence from the Huntington Beach gage indicates that when the spectral peak period is greater than about 10 sec, prominent secondary peaks at higher frequency are common, but they typically contain little energy relative to the highest peak (Thompson 1980). Thus, the likelihood of a hindcast sea period being chosen when a swell peak would actually be highest appears to be small.

44. The most exposed offshore gages are Harvest, 46023, and 46024. Wave height percent occurrence plots in Appendix A show almost no difference between gage and hindcast at these sites. Wave period percent occurrence plots are also very similar. There is a small tendency for more long periods and fewer short periods in the hindcast relative to the gages. Mean values in Table 6 are very similar.

45. The comparisons become more subjective for the partially sheltered offshore gages. The hindcast heights at Mission Bay tend to be higher than the gage heights (Appendix A), but the hindcast point is more exposed to waves coming from the west and west-northwest. The differences at Begg Rock are similar but smaller. The hindcast at Begg Rock may not fully include the effect of the large local shoal. The tendency for hindcast heights to exceed gage measurements at Santa Cruz Canyon buoy may be attributed to greater sheltering of the gage location. The hindcast and gage height plots at San Pedro Channel buoy and 46025 are remarkably similar. The wave period percent occurrence plots show reasonably good agreement but a tendency for the hindcast to have a deficit of short periods (4-8 sec) and an excess of periods longer than 8 sec relative to the gages.

46. Maximum heights are more variable, but gage maxima tend to exceed WIS maxima (Table 6). Many of the gage maxima came from the very severe storm of 17-18 January 1988, as noted in Table 6. The values in this table are from a separate WIS hindcast of extreme storm events affecting southern California.

47. The gage and WIS percent occurrence plots in Appendix B are remarkably similar for most nearshore sites. A tendency for the gage percent occurrence to exceed WIS at 5 sec may be related to the inherent difficulties in compensating a pressure spectrum to represent surface conditions (Esteva and Harris 1970). The scarcity of short periods in the Huntington Beach plot (the only nearshore surface-piercing gage) lends support to that interpretation. Mean parameters are generally comparable, within 10 percent at many sites.

48. Concurrent WIS and gage time-history information was available for approximately 12 months at Huntington Beach and 6 months at Channel Islands. Representative plots are given in Appendix C. The WIS estimates in Appendix C do not include southern swell because statistical estimates of southern swell would degrade the time-history comparison. Also, southern swell is inconsequential during the month shown.

49. An event occurred on December 4, 1974 that produced wave heights over 2 m at both gages (Appendix C). Weather maps show a well-organized cold front which swept eastward across the Southern California Bight. The front produced a short-term landward air flow. The WIS would be expected to reproduce well-organized events such as this, which cover a large spatial area relative to the numerical grid elements. In fact, the WIS hindcast for the event is excellent. The magnitude and timing of wave height and period at the peak of the event are well-estimated at both locations. The rising and falling wave conditions are also reproduced quite well.

50. Around 10 December, a long period swell appears due to a large low pressure system in the North Pacific. The WIS estimates compare reasonably well with gage measurements. At Huntington Beach, WIS matched the peak significant height and falling wave conditions very well. The WIS estimates of the rising wave conditions preceded the measurements by about 1 day. The WIS periods during the event are generally shorter and are shifted down one band from the gage periods. At Channel Islands Harbor, all aspects of the event are well-estimated by WIS except for a very localized, short-term rise and fall of wave height superimposed on the broader swell event. The WIS model missed the short-term phenomenon.

51. Between 19 and 24 December, several poorly organized weather situations occurred, including a cold front passage, which increased wave

heights at both gages. The WIS model successfully estimated increased wave activity, but the details were not well reproduced. This level of success can be expected when the model is applied to poorly organized weather systems.

52. Around 28 December, a weak low-pressure center overland accompanied by a cold front passed by the Southern California Bight. Isobars associated with the landward winds were poorly organized. The WIS model did very well in predicting the timing of the event and the wave periods, but it underpredicted the peak significant heights by approximately 2 m.

Discussion and Conclusions

53. The comparisons with both nearshore and offshore measurements in many areas of the Southern California Bight validate the WIS hindcast and help to document the level of accuracy. Mean significant wave heights (based on energy) and peak periods from the gages and WIS are shown as scatter plots in Figures 6 and 7. The WIS results appear relatively unbiased. The figures include an envelope that encloses WIS results, which are within 10 percent of the gage results. The agreement is generally good. Most points, including all of the exposed offshore sites, fall within the 10-percent envelope.

54. The comparisons have also served to show the critical importance of the shallow-water transformation process and southern swell to nearshore wave estimation in the entire Bight. The importance of southern swell is emphasized in Table 8. This table was produced by counting the number of occurrences in the 20-year time series at each location when the southern swell component was higher than the local sea or North Pacific derived energy component. The seasonality of the southern swell component is illustrated for Huntington Beach in Figures 8 and 9, which demonstrate that southern swell is a significant component of the wave climate between April and October.

55. The 17-18 January 1988 storm is clearly an episodic event, which should be included in estimates of extreme wave conditions at southern California sites. This event is not part of the WIS hindcast time period and is not included in the summary tables in Appendix D of this report. However, the storm was hindcast as part of the WIS verification effort (Table 7). It should be given special consideration for applications in which large storms are important.

Comparisons with Previous Hindcasts

56. The principal sources of offshore design wave information for southern California during the past three decades have been two hindcasting studies performed by the National Marine Consultants (NMC) and the Marine Advisors (MA) (National Marine Consultants 1960; and Marine Advisors 1961). Nearshore hindcasts, not including nearshore refraction and shoaling, were also presented by MA for several sites. Several additional highly site-specific hindcast studies have been performed using NMC or MA as offshore boundary conditions.

57. The WIS results are derived with improved wave growth theories and much more powerful and comprehensive computational tools than were available 30 years ago. However, the NMC and MA data sets embody the intuition of experienced personnel and have become benchmark data sets for the area. It is worthwhile to provide perspective on these older data sets relative to WIS.

58. The NMC hindcasts cover the years 1956-1958 at two southern California locations (Figure 10). Both stations (6 and 7) include sea and swell from weather events in the North Pacific. Station 6 does not include nearshore effects, such as islands or shoals, other than local winds and sheltering from the mainland. Wave information was generated by identifying fetch and wind speed on synoptic weather charts and using the Pierson, Neumann, and James (1963) formulation for wave growth and propagation.

59. Separate swell trains are maintained and treated as separate events in the statistical summaries. If the periods and directions of two simultaneous swells are similar, the energies are combined to give one event. The total percentage of swell events in the statistical summaries can exceed 100 because of the common occurrence of multiple swell trains.

60. The MA hindcasts nominally cover the years 1956-1958 at three southern California locations (Figure 10). All three stations include sea and swell from weather events in the North Pacific. Separate tables for swell from the Southern Hemisphere during the years 1948-1950 are also included. Seas at station A are based on wind measurements at San Nicolas Island during several years prior to 1956, as no wind measurements were available during 1956-1958.

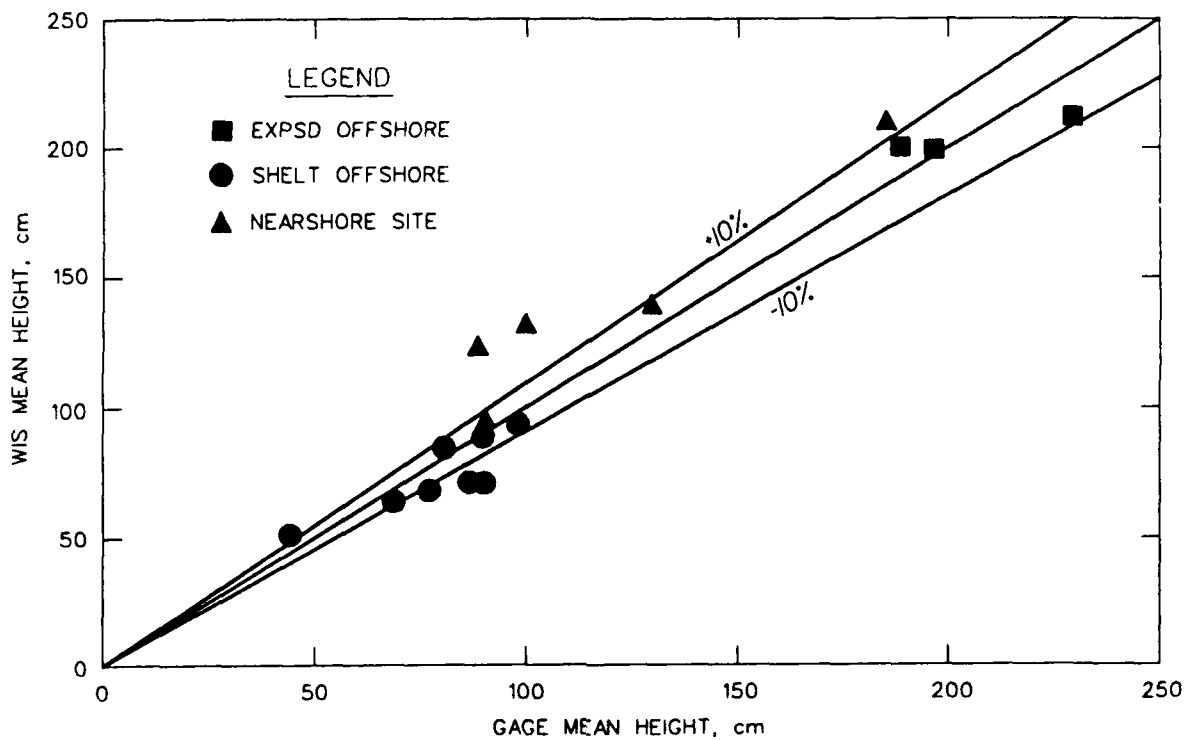


Figure 6. Comparison of mean energy-based wave heights

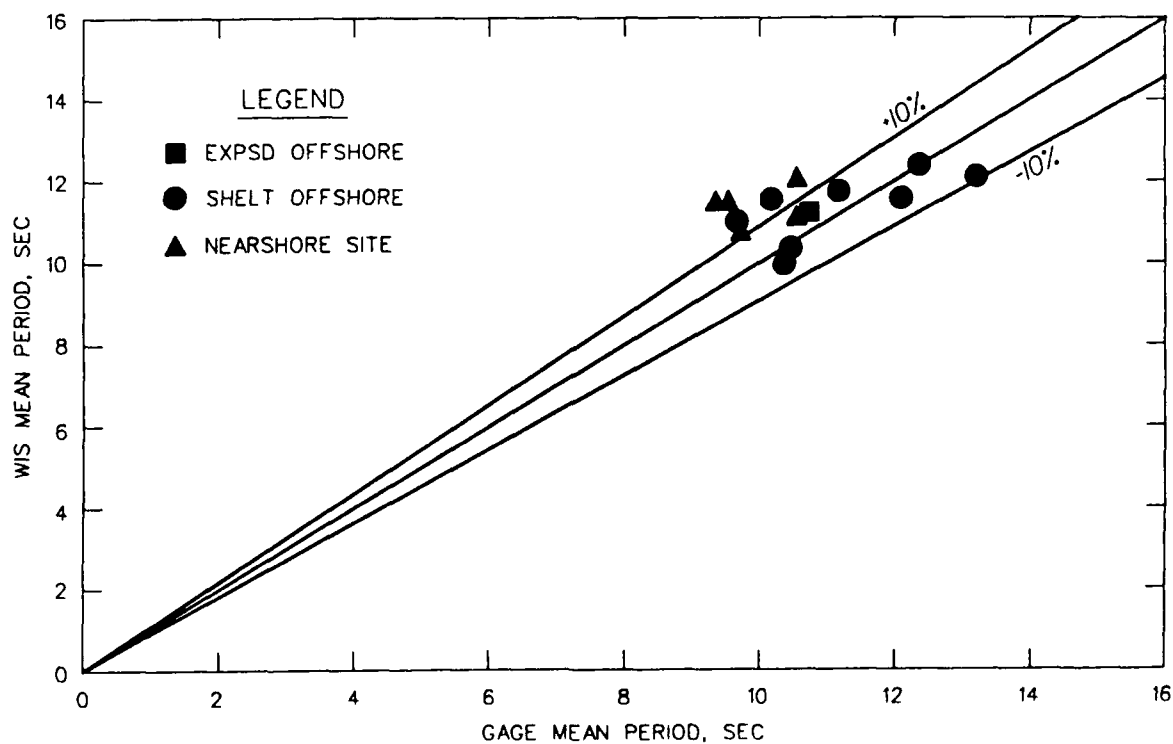


Figure 7. Comparison of mean peak wave periods

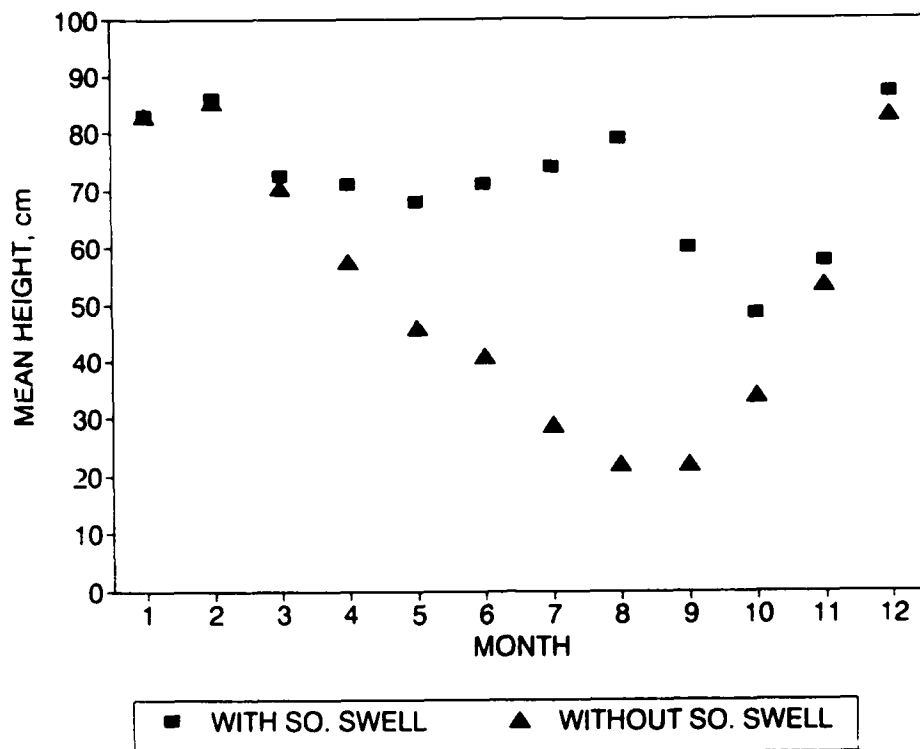


Figure 8. Comparison of WIS hindcast wave heights at Huntington Beach with and without southern swell

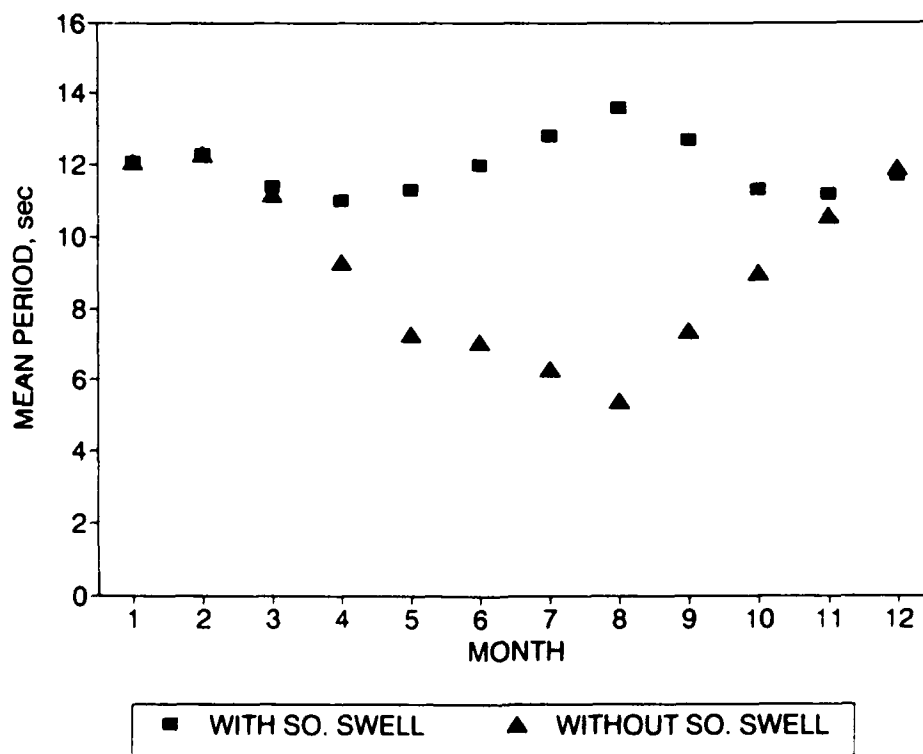


Figure 9. Comparison of WIS hindcast wave periods at Huntington Beach with and without southern swell

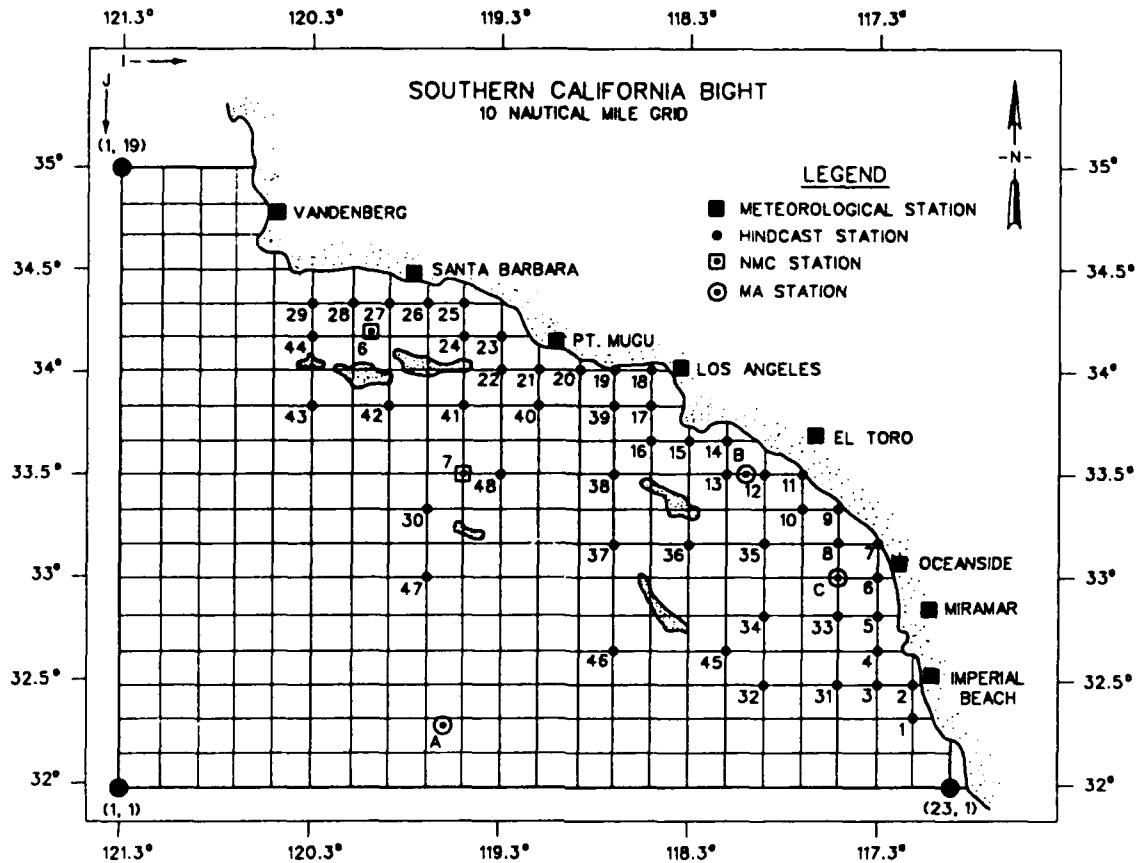


Figure 10. Locations of previous hindcast information

61. Swell calculations were constrained to permit, at most, one swell train at a time. When a new swell appeared, the old swell (if one existed) was ignored. This procedure is acknowledged by MA to underestimate overall swell heights.

62. The nearshore stations, B and C, represent deepwater conditions approximately 10 miles offshore from Newport Beach and Encinitas, respectively. They include the effects of local winds and island sheltering (both exposed island land mass and submerged shoals) but not diffraction around islands, refraction around island shoals, or nearshore refraction and shoaling. Wave information was generated by identifying fetch and wind speed on daily weather maps and using the Sverdrup-Munk-Bretschneider formulation (Bretschneider 1957) for wave growth.

63. Sea statistics at both stations B and C are based on wind measurements at Oceanside during the years 1934-1938. These local winds were

used to generate local waves. The sea statistics also include local seas generated at station A (based on San Nicolas Island winds) and modified for blockage by islands and shoals. Ideally the offshore and nearshore seas would have been paired and their energies would have been added to give a combined sea wave height. This was not possible, however, because the time periods represented by offshore and nearshore seas were nonoverlapping.

64. The 3 years, 1956-1958, were extracted from the WIS data set for relevant stations to match the time period of the NMC and MA hindcasts. Stations included are 6, 8, 12, 13, 27, 28, 30, 42, 46, 47, and 48. Percent occurrence tables were run to be compatible with the information presented by NMC and MA. The changes include modified height and period intervals, separate tables for sea and swell, and tabulation of calm conditions.

65. Each NMC and MA station is compared to a nearby WIS station. The WIS stations 6, 12, 28, 47, and 48 were used. Mean and maximum significant wave heights and mean peak periods for the 3-year period are tabulated in Table 9. The NMC and MA means were computed using interval mid points and percentages from the NMC and MA reports. Maximum wave heights for MA are taken as the highest wave height for which either a percentage value or a trace indicator is given in the original MA tables.

Discussion and Conclusions

66. Because of the shortcomings in the NMC and MA methodologies, the comparisons with WIS are qualitative and serve to put the older studies into perspective relative to the new WIS results. The most definitive evaluation of the WIS results is the comparison to high quality wave measurements in southern California.

67. The local wind sea comparisons are highly subjective because of the poor quality wind data available to NMC and MA. The comparisons do not merit further comment.

68. Mean swell heights from WIS and NMC are within about 30 cm. The MA swell heights are consistently low relative to WIS. As mentioned earlier, the MA estimates represent one swell train at any given time, which leads to an acknowledged underestimate of swell energy. The comparisons confirm this conclusion.

69. Maximum swell heights compare very well, with differences less than 30 cm in most cases. The maximum swell over the 3-year period would be attributed to a large storm in the North Pacific. Such a strong, well-defined event is more amenable to hindcasting than the multiple, weaker, more variable systems typical of routine weather. All three hindcast methodologies were applied to the same 3-year time period and were expected to perform well for such an event. Thus, the good comparisons of maximum swell height are not surprising.

70. Mean swell periods (periods longer than 8 sec) are within about 0.5 sec for WIS and NMC. Differences are on the order of 2 sec for WIS and MA, with MA periods tending to be longer than WIS periods.

71. In conclusion, the WIS hindcasts compare favorably with the NMC and MA hindcasts in terms of the parameters which are best estimated by the older methodologies. However, the WIS methodology is much more comprehensive and complete. It provides a climatology record that is considerably improved over the older NMC and MA efforts.

PART IV: USE OF TABLES

72. This report is intended only as a general description of wave characteristics such as significant height, peak period, and mean direction at stations 1-29 of Figure 2. Wave information is available from the WIS database for stations 30-48, but is not summarized in this report. The significant wave height is defined as four times the square root of the total energy in the wave spectrum. The peak period is defined as the period associated with the center frequency of the frequency band in the spectrum containing the largest amount of energy. The direction is defined as the energy weighted mean direction. There are 16 directional bands centered on the 16 points of the compass. These center directions are shown in Table 2. The directional convention assumes waves are coming from these directions.

Percent Occurrence Tables

Description

73. Two types of tables are printed: percent occurrence of wave height and period for each directional band and a table for all directions. These tables are in Appendix D. The directional bandwidths and mid-band values are shown in Table 2. The model frequencies and corresponding periods are shown in Table 1. The wave height ranges are in 0.5-m increments as shown in the tables. Values in the directional tables represent the percentage of the 20-year period during which waves occurred from the specified range of directions for the indicated height and period ranges. The values have been multiplied by 1,000 to reduce the effects of truncation. Summation of percentages for heights and periods in the table are given in the right-most column and bottom row, respectively. Summation of this row or column may not result in 100 percent due to truncation. Summary statistics of mean and maximum wave height, mean wave period, and number of occurrences are on the last row for each station. The table for all directions follows the last directional range table and gives the percent occurrence of waves within specified height and period ranges for all directions. The values in this table have been multiplied by 100. The statistics in the last row of this table are derived from the entire 20-year time series (58,440 values).

Example

74. Suppose a user wishes to find the number of occurrences (in 3-hr intervals) at station 1 in which waves between 2.00- and 2.49-m high having wave periods of 11.8- to 13.3-sec originated from the west between 1956 and 1975. He first finds the directional table for azimuth 270 deg for station 1. Next he locates the intersection of the 2.00- to 2.49-m wave height row and the 11.8- to 13.3-sec wave period column. For this example, the number is 2,203. The user divides this number by 1,000 to get 2.203 percent. Since there are 58,440 possible occurrences, this condition existed 1,287 times ($0.02203 \times 58,440$) or approximately 161 days $[(3 \text{ hr} \times 1,287)/24 \text{ hr per day}]$ or on the average of 8 days per year.

Statistics Tables

Description

75. The statistics tables in Appendix D provide: (a) the mean wave height for each month of each year, (b) the mean for each year, (c) the mean over all years of each month, and (d) the largest wave height that occurred in each month for all the years. In addition, statistics from the 20-year record are provided, such as mean height and peak period, largest height and associated peak period, mean direction, and date of occurrence.

Example

76. To find the mean wave height for a given month and year, the user simply finds the intersection of month and year on the Mean H_s by Month and Year Table. For example, at station 1 the mean wave height for March 1963 is 1.5 m. The mean wave height for all Marches is shown at the bottom row and for this case is also 1.5 m. The mean wave height for all months of 1963 is 1.2 m found on the right-most column. To find the largest significant wave height for this time and station, the user references the Largest H_s by Month and Year Table below the Mean Table. In this case it would be 2.8 m. The largest significant wave calculated for this station is found in the summary statistics below the Largest H_s by Month and Year Table. For this case it is 3.8 m and occurred at 00 hr GMT on 8 June 1964, with a peak period of 11.1 sec coming from 267 deg true north.

Wave Rose Diagrams

Description

77. The wave rose diagrams (Appendix D) schematically illustrate the distribution of wave heights and directions at each station. They should be used to obtain a general impression of wave conditions at a site. The width of each bar in the diagram corresponds to a wave height range as indicated in the legend. The orientation of the bar indicates the mid-point of the directional band from which the waves are coming. The distance between each circle on the diagram is 20 percent to aid in estimating percentages. The number in the pie slice at the end of the bars is the total percent, to the closest 1 percent, for waves of all heights coming from that directional band.

Example

78. The wave rose diagram for station 1 indicates that 98 percent of the waves were from the west, 270-deg band (waves moving west to east), and of the 98 percent, approximately 39 percent were 0.0-0.9 m, and 51 percent were 1.0-1.9 m. etc. The total for each leg is 100 percent for the specified direction. If no leg is shown, as for station 29, no waves were calculated for that directional band.

Return Periods

Description

79. Return periods were calculated for each station and are presented in Table 10. The 20-year time series of significant wave heights were ranked from largest to smallest. Individual high wave events were defined by requiring a separation of at least 5 days between adjacent values. The return periods were then calculated by dividing the number of years of the hindcast (20), plus 1, by the rank of the individual events m , where $m = 1, 2, 3, 4, 7$, and 21 to give return periods of 21.00, 10.50, 7.00, 5.25, 3.00, and 1.00 years, respectively.

Example

80. Suppose a user wishes to find the wave height associated with a return period of 7 years at station 3. He refers to Table 10 to find the information associated with station 3. He reads across the row titled "Return

Period" until he finds 7. and the intersecting value, 4.3 m in this case, is the 7-year return period wave height at station 3.

PART V: SUMMARY

81. The objective of this study was to produce information on wave conditions at locations relatively near the coast from Point Conception, California to the Mexican border. The approach was to apply wave hindcast techniques to produce wave information for the period 1956-1975 that accurately characterizes the wave climatology in the region. These techniques included the estimation of meso-scale meteorology (land-sea breeze), the representation of the sheltering effects of the islands in the region, and refraction and diffraction by bathymetric features. The resulting wave information was compared to measurements and other hindcasts to verify the accurate representation of the wave climate. The comparisons with both nearshore and offshore measurements in many areas of the Southern California Bight validate the WIS hindcast. The distributions of heights and periods are relatively unbiased and generally agree to within 10 percent to similar distributions from gage data. Comparisons to previous hindcasts are more qualitative, but in general the climatologies agree. The WIS results have been summarized in tables in this report. The time series of wind and wave parameters and directional spectra are available from the WIS database for more specific analysis as required.

82. The wave results presented in this report were produced by numerical simulation of wave growth, propagation, and decay using historical wind fields. Numerical modeling of surface waves represents a reliable means of obtaining wave information for climatological purposes. This tool, coupled with statistical methods, data processing technology, and planning and design capabilities, offers the potential to solve coastal engineering problems. By relating observed data and hindcast results to physical processes, an understanding of the coastal processes is possible. This understanding can increase confidence in recognizing trends, distributions, and correlations among variables which can, in turn, increase confidence in many basic planning, design, construction, operation, and maintenance decisions.

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Table 1
Frequency Ranges Used in WIS Hindcast Model

Midband				Grouping for Percent Occurrence Tables
Frequency Hz	Period sec	Band Range	Period sec	
0.22	4.5	4.44	$\leq T < 4.65$	4.4-6.0
0.21	4.8	4.65	$\leq T < 4.88$	
0.20	5.0	4.88	$\leq T < 5.13$	
0.19	5.3	5.13	$\leq T < 5.41$	
0.18	5.6	5.41	$\leq T < 5.71$	
0.17	5.9	5.71	$\leq T < 6.06$	
0.16	6.2	6.06	$\leq T < 6.45$	6.1-8.0
0.15	6.7	6.45	$\leq T < 6.90$	
0.14	7.1	6.90	$\leq T < 7.41$	
0.13	7.7	7.41	$\leq T < 8.00$	
0.12	8.3	8.00	$\leq T < 8.70$	8.1-9.5
0.11	9.1	8.70	$\leq T < 9.52$	
0.10	10.0	9.52	$\leq T < 10.53$	9.6-10.5
0.09	11.1	10.53	$\leq T < 11.76$	10.6-11.7
0.08	12.5	11.76	$\leq T < 13.33$	11.8-13.3
0.07	14.3	13.33	$\leq T < 15.38$	13.4-15.3
0.06	16.7	15.38	$\leq T < 18.18$	15.4-18.1
0.05	20.0	18.18	$\leq T < 22.22$	18.2-22.2
0.04	25.0	22.22	$\leq T < 28.57$	22.3-longer
0.03	33.3	28.57	$\leq T < 40.00$	

Table 2
Ranges for Direction Intervals in
Percent Occurrence Tables

Midband deg	Range deg
0.0	348.75 < D < 11.25
22.5	11.25 < D < 33.75
45.0	33.75 < D < 56.25
67.5	56.25 < D < 78.75
90.0	78.75 < D < 101.25
112.5	101.25 < D < 123.75
135.0	123.75 < D < 146.25
157.5	146.25 < D < 168.75
180.0	168.75 < D < 191.25
202.5	191.25 < D < 213.75
225.0	213.75 < D < 236.25
247.5	236.25 < D < 258.75
270.0	258.75 < D < 281.25
292.5	281.25 < D < 303.75
315.0	303.75 < D < 326.25
337.5	326.25 < D < 348.75

Table 3
Southern California Hindcast Stations

<u>Station</u>	<u>(I,J) Location</u>	<u>Latitude, deg N</u>	<u>Longitude, deg W</u>	<u>Depth, m</u>
1	22,3	32.33	117.12	55
2	22,4	32.50	117.12	22
3	21,4	32.50	117.32	366
4	21,5	32.67	117.32	183
5	21,6	32.83	117.32	101
6	21,7	33.00	117.32	393
7	21,8	33.17	117.32	20
8	20,8	33.17	117.52	649
9	20,9	33.33	117.52	20
10	19,9	33.33	117.72	732
11	19,10	33.50	117.72	27
12	18,10	33.50	117.92	485
13	17,10	33.50	118.12	366
14	17,11	33.67	118.12	27
15	16,11	33.67	118.32	137
16	15,11	33.67	118.52	137
17	15,12	33.83	118.52	137
18	15,13	34.00	118.52	27
19	14,13	34.00	118.72	64
20	13,13	34.00	118.92	256
21	12,13	34.00	119.12	585
22	11,13	34.00	119.32	375
23	11,14	34.17	119.32	24
24	10,14	34.17	119.52	238
25	10,15	34.33	119.52	51
26	9,15	34.33	119.72	82
27	8,15	34.33	119.92	439
28	7,15	34.33	120.12	512
29	6,15	34.33	120.32	329

Table 4
Wave Gages for Comparison to Hindcast

<u>Name</u>	<u>Type</u>	<u>Location</u>		<u>Depth</u> <u>m</u>	<u>Program</u>
		<u>N Lat.</u>	<u>W Long.</u>		
<u>Offshore Gages</u>					
Mission Bay	Buoy	32° 45.9'	117° 22.5'	168	CDIP
Begg Rock	Buoy	33° 24.4'	119° 40.1'	110	CDIP
San Pedro Channel	Buoy	33° 35.0'	118° 14.9'	117	CDIP
Santa Cruz Canyon	Buoy	33° 55.0'	119° 44.0'	366	CDIP
Harvest Platform	Press. gage	34° 28.2'	120° 40.9'	204	CDIP
Station 46023	Buoy	34° 18'	120° 42'	622	NDBC
Station 46024	Buoy	32° 48'	119° 12'	1,390	NDBC
Station 46025	Buoy	33° 36'	119° 00'	839	NDBC
<u>Nearshore Gages</u>					
Imperial Beach	Press. array	32° 35.0'	117° 08.2'	10	CDIP
Mission Bay Ent.	Press. array	32° 45.4'	117° 15.7'	10	CDIP
Scripps Pier	Press. gage	32° 52.0'	117° 15.4'	8	CDIP
Del Mar	Press. array	32° 57.4'	117° 16.7'	10	CDIP
Oceanside Beach	Press. array	33° 11.4'	117° 23.4'	9	CDIP
San Clemente	Press. array	33° 24.9'	117° 37.8'	10	CDIP
Huntington Beach	Staff	33° 39'	118° 00'	9	COE
Sunset Beach	Press. array	33° 42.5'	118° 04.2'	8	CDIP
Channel Islands CDIP/COE	Press. gage	34° 10.0'	119° 14.2'	6	
Santa Barbara Pt.	Press. array	34° 24.1'	119° 41.6'	9	CDIP

Table 5

Parameters for Transformation of Hindcast to Nearshore Gage Locations

<u>Name</u>	<u>Hindcast Station</u>	<u>Offshore Depth m</u>	<u>Nearshore Depth m</u>	<u>Sheltering*</u>	<u>Shoreline Orientation deg azimuth</u>
Mission Bay Ent.	4	183	10	0-10	180
Del Mar	6	393	11	170-180	168
Oceanside Beach	7	20	9	NONE	140
San Clemente	9	27	10	NONE	135
Huntington Beach	14	27	9	0-20	130
Sunset Beach	14	27	8	0-40	130
Channel Islands	23	24	7	NONE	155
Santa Barbara Pt.	26	82	9	NONE	100

* Sheltering is expressed in degrees relative to shore using the WIS Phase III convention. See Figure 5.

Table 6
Statistical Parameters from Gage and Hindcast Information

<u>Name</u>	<u>Height</u>				<u>Period</u>		<u>Direction</u>
	WIS Mean <u>cm</u>	Gage Mean <u>cm</u>	WIS Max <u>cm</u>	Gage Max <u>cm</u>	WIS Mean <u>sec</u>	Gage Mean <u>sec</u>	WIS Mean <u>deg**</u>
<u>Offshore Gages</u>							
Mission Bay	132	101	430	665*	11.1	10.6	264
Begg Rock	209	187	646	1,012*	10.7	9.8	284
San Pedro Channel	96	91	352	267	11.5	9.6	247
Santa Cruz Canyon	124	89	422	482*	12.0	10.6	239
Harvest Platform	197	198	696	883*	11.2	10.8	275
Station 46023	210	230	682	800	11.0	10.7	284
Station 46024	199	190	656	850	11.0	10.7	277
Station 46025	139	130	479	700	11.5	9.4	261
<u>Nearshore Gages</u>							
Mission Bay Ent.	94	98	308	611*	9.9	10.4	278
Del Mar	72	90	328	451*	10.3	10.5	278
Oceanside Beach	85	81	320	482*	11.7	11.2	285
San Clemente	69	77	320	355*	11.5	12.1	283
Huntington Beach	72	87	263	298	12.0	13.2	279
Sunset Beach	65	69	267	395	12.3	12.4	274
Channel Islands	89	90	322	315	11.5	10.2	277
Santa Barbara Pt.	52	45	199	195	11.0	9.7	288

* From 17-18 January 1988 storm.

** Directions are from azimuth North.

Table 7
Maximum Hindcast Wave Conditions in Southern California
for the Period 12-19 January 1988

<u>WIS</u> <u>Station</u>	<u>Significant Height</u> <u>cm</u>	<u>Peak Period</u> <u>sec</u>	<u>Direction</u> <u>deg azimuth</u>
1	550	12.5	266
2	610	12.5	267
3	660	12.5	272
4	660	12.5	270
5	520	11.1	264
6	460	11.1	251
7	500	12.5	255
8	520	12.5	258
9	450	12.5	250
10	410	11.1	239
11	430	12.5	262
12	450	12.5	268
13	450	12.5	275
14	560	14.3	263
15	580	12.5	268
16	620	12.5	267
17	520	11.1	255
18	480	11.1	236
19	540	10.0	228
20	550	11.1	228
21	530	11.1	232
22	520	10.0	222
23	520	12.5	269
24	540	12.5	277
25	540	14.3	264
26	570	14.3	268
27	620	12.5	267
28	660	12.5	273
29	750	12.5	277
30	860	12.5	284
-1	820	14.3	289
-2	880	12.5	288

Note: Point -1 located at (I=5,J=15) one square west of point 29
and point -2 located at (I=5,J=14) one square west of point 44.

Table 8
Importance of Southern Swell

<u>Name</u>	<u>Percentage of Cases Dominated by Southern Swell</u>
<u>Offshore Gages</u>	
Mission Bay	19
Begg Rock	7
San Pedro Channel	28
Santa Cruz Canyon	34
Harvest Platform	12
Station 46023	9
Station 46024	11
Station 46025	22
<u>Nearshore Gages</u>	
Mission Bay Ent.	13
Del Mar	39
Oceanside Beach	40
San Clemente	44
Huntington Beach	37
Sunset Beach	41
Channel Islands	31
Santa Barbara Pt.	26

Table 9
Comparison of WIS to NMC and MA Data
for the Period 1956-1958

<u>Mean Significant Wave Heights</u>							
<u>Sea</u>				<u>Swell</u>			
<u>Station</u>	<u>cm</u>	<u>Station</u>	<u>cm</u>	<u>Station</u>	<u>cm</u>	<u>Station</u>	<u>cm</u>
WIS 6	55	MA C	27	WIS 6	37	MA C	21
WIS 12	49	MA B	27	WIS 12	49	MA B	15
WIS 28	49	NMC 6	82	WIS 28	128	NMC 6	134
WIS 47	85	MA A	73	WIS 47	171	MA A	69
WIS 48	73	NMC 7	96	WIS 48	125	NMC 7	92

<u>Maximum Significant Wave Heights</u>							
<u>Sea</u>				<u>Swell</u>			
<u>Station</u>	<u>cm</u>	<u>Station</u>	<u>cm</u>	<u>Station</u>	<u>cm</u>	<u>Station</u>	<u>cm</u>
WIS 6	241	MA C	396	WIS 6	219	MA C	213
WIS 12	210	MA B	396	WIS 12	201	MA B	168
WIS 28	229	NMC 6	488	WIS 28	521	NMC 6	549
WIS 47	479	MA A	518	WIS 47	579	MA A	579
WIS 48	271	NMC 7	488	WIS 48	479	NMC 7	488

<u>Mean Peak Wave Periods</u>							
<u>Sea</u>				<u>Swell</u>			
<u>Station</u>	<u>sec</u>	<u>Station</u>	<u>sec</u>	<u>Station</u>	<u>sec</u>	<u>Station</u>	<u>sec</u>
WIS 6	3.2	MA C	4.9	WIS 6	10.7	MA C	13.0
WIS 12	3.0	MA B	4.5	WIS 12	10.9	MA B	13.0
WIS 28	2.9	NMC 6	6.2	WIS 28	10.8	NMC 6	10.2
WIS 47	4.3	MA A	4.8	WIS 47	10.9	MA A	12.7
WIS 48	3.9	NMC 7	6.7	WIS 48	10.8	NMC 7	10.5

Table 10
Return Period Wave Heights, m

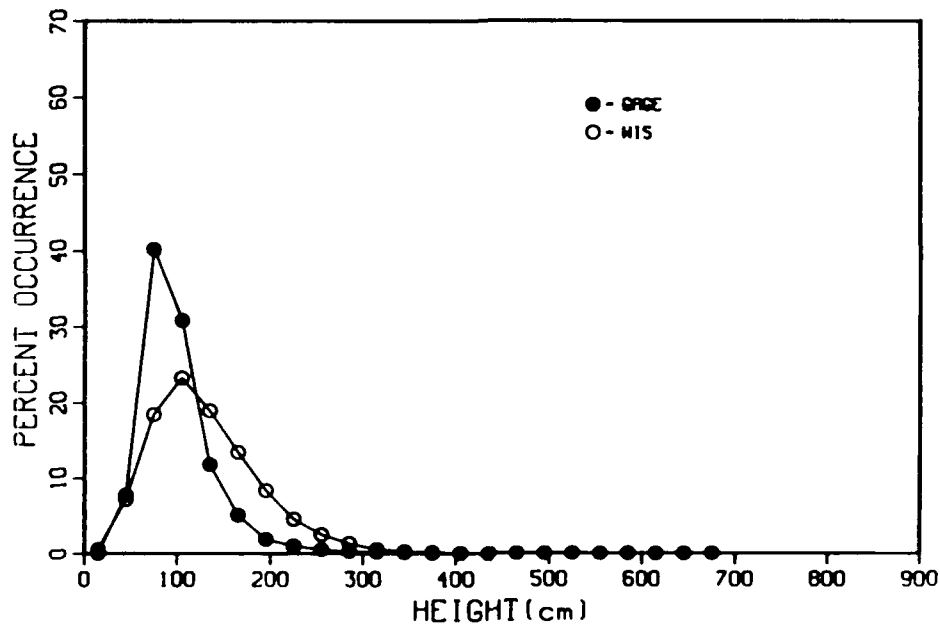
<u>Station</u>	<u>Return Period, years</u>					
	<u>1</u>	<u>3</u>	<u>5.25</u>	<u>7</u>	<u>10.5</u>	<u>21</u>
1	3.2	3.6	3.6	3.6	3.8	3.8
2	3.3	3.7	3.8	3.9	4.0	4.1
3	3.6	4.1	4.3	4.3	4.5	4.6
4	3.4	3.9	4.0	4.0	4.2	4.3
5	2.8	2.9	3.0	3.0	3.1	3.4
6	2.4	2.7	2.7	2.8	2.8	3.2
7	2.5	2.8	2.9	2.9	2.9	3.1
8	2.6	2.9	3.0	3.0	3.0	3.4
9	2.2	2.5	2.6	2.7	2.8	3.0
10	2.1	2.5	2.5	2.6	2.6	3.1
11	2.1	2.3	2.4	2.4	2.4	2.5
12	2.1	2.5	2.5	2.6	2.7	3.0
13	2.3	2.7	2.8	2.8	3.0	3.3
14	2.7	3.0	3.2	3.2	3.4	3.5
15	2.8	3.2	3.2	3.3	3.5	3.5
16	3.0	3.4	3.5	3.7	3.7	3.7
17	2.5	2.7	2.8	2.8	2.8	2.9
18	2.2	2.4	2.4	2.5	2.6	2.7
19	2.4	2.7	2.8	3.1	3.1	3.5
20	2.4	2.7	3.0	3.1	3.2	3.7
21	2.5	2.7	3.2	3.2	3.2	3.8
22	2.4	2.9	3.1	3.2	3.3	4.0
23	2.8	3.2	3.5	3.6	3.7	4.0
24	2.9	3.3	3.5	3.5	3.6	3.8
25	3.1	3.7	3.8	4.0	4.1	4.5
26	3.2	3.8	3.9	4.0	4.1	4.5
27	3.6	4.1	4.4	4.6	4.6	5.0
28	4.1	4.5	5.3	5.3	5.4	5.8
29	5.0	5.4	6.5	6.5	6.6	7.0

APPENDIX A: COMPARISON OF OFFSHORE GAGE DATA TO WIS DATA

ENERGY BASED WAVE HEIGHT COMPARISON MISSION BAY BUOY (CDIP vs WIS STA 4)

Water Depth: 168.0m
Bin Width: 30cm

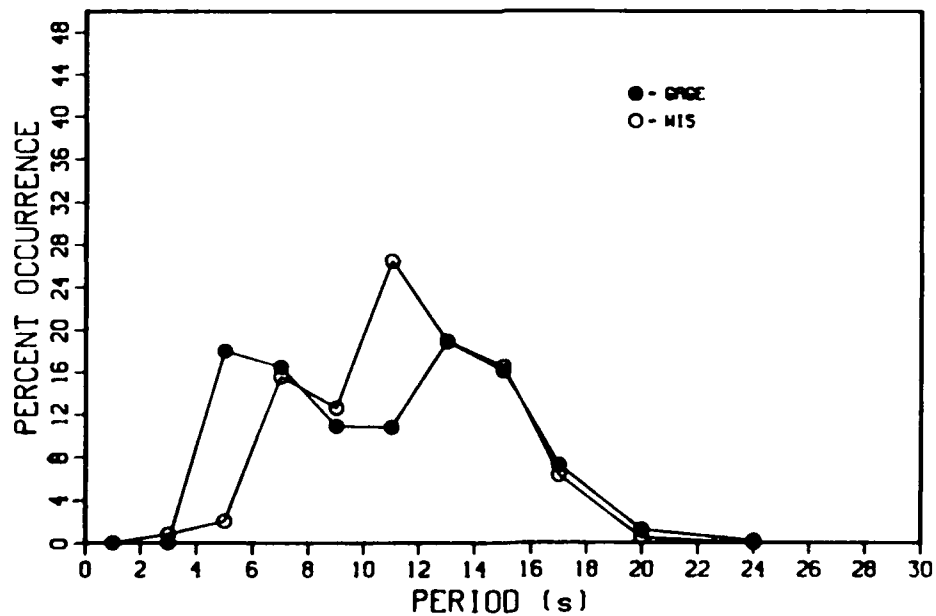
No. Obs: WIS 58,440; CDIP 6,455
Years: WIS 1956-75; CDIP 1981,85,86,87,88



PEAK SPECTRAL PERIOD COMPARISON MISSION BAY BUOY (CDIP vs WIS STA 4)

Water Depth: 168.0m
Bin Width: 2 sec

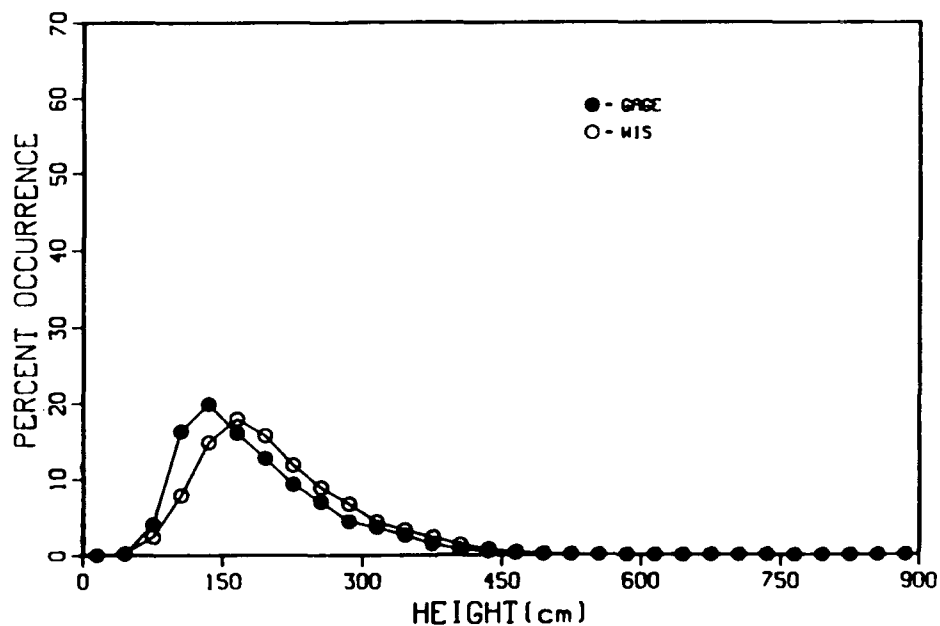
No. Obs: WIS 58,440; CDIP 6,455
Years: WIS 1956-75; CDIP 1981,85,86,87,88



ENERGY BASED WAVE HEIGHT COMPARISON BEGG ROCK BUOY (CDIP vs WIS STA 30)

Water Depth: 110.0m
Bin Width: 30cm

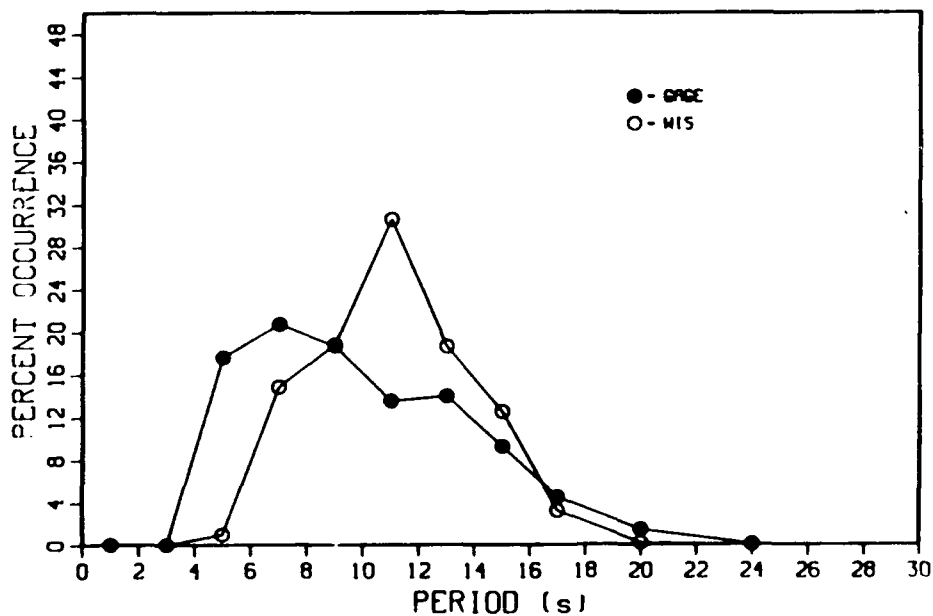
No. Obs: WIS 58,440; CDIP 4,038
Years: WIS 1956-75; CDIP 1983,84,88



PEAK SPECTRAL PERIOD COMPARISON BEGG ROCK BUOY (CDIP vs WIS STA 30)

Water Depth: 110.0m
Bin Width: 2 sec

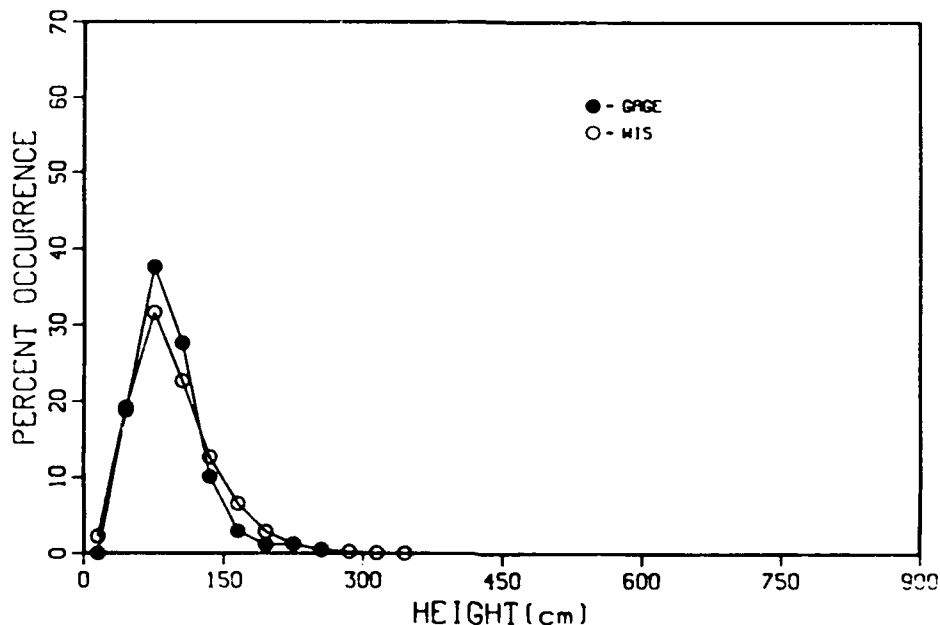
No. Obs: WIS 58,440; CDIP 4,038
Years: WIS 1956-75; CDIP 1983,84,88



ENERGY BASED WAVE HEIGHT COMPARISON SAN PEDRO CHANNEL BUOY (CDIP vs WIS STA 14)

Water Depth: 117.0m
Bin Width: 30cm

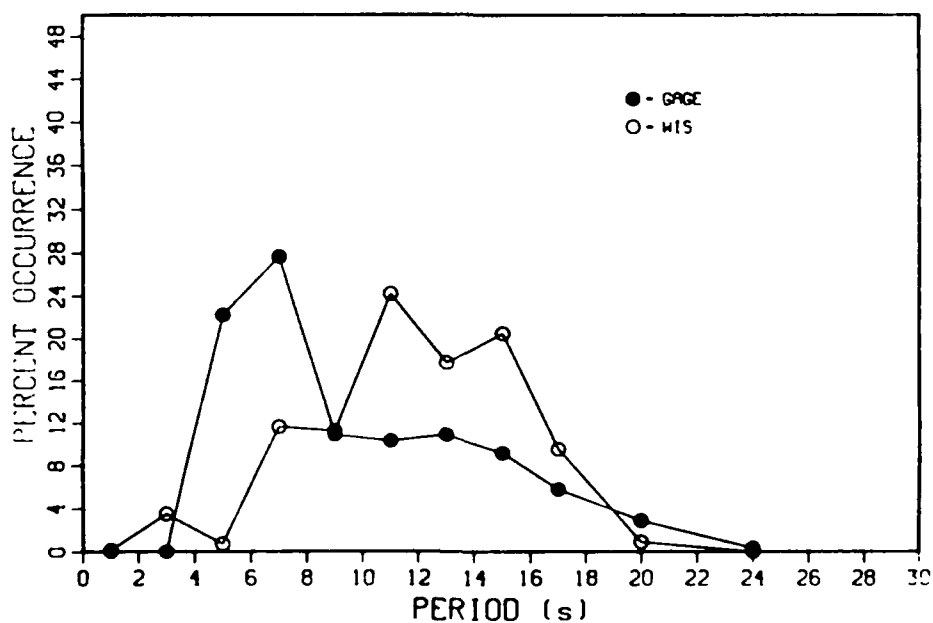
No. Obs: WIS 58,440; CDIP 1,215
Years: WIS 1956-75; CDIP 1981



PEAK SPECTRAL PERIOD COMPARISON SAN PEDRO CHANNEL BUOY (CDIP vs WIS STA 14)

Water Depth: 117.0m
Bin Width: 2 sec

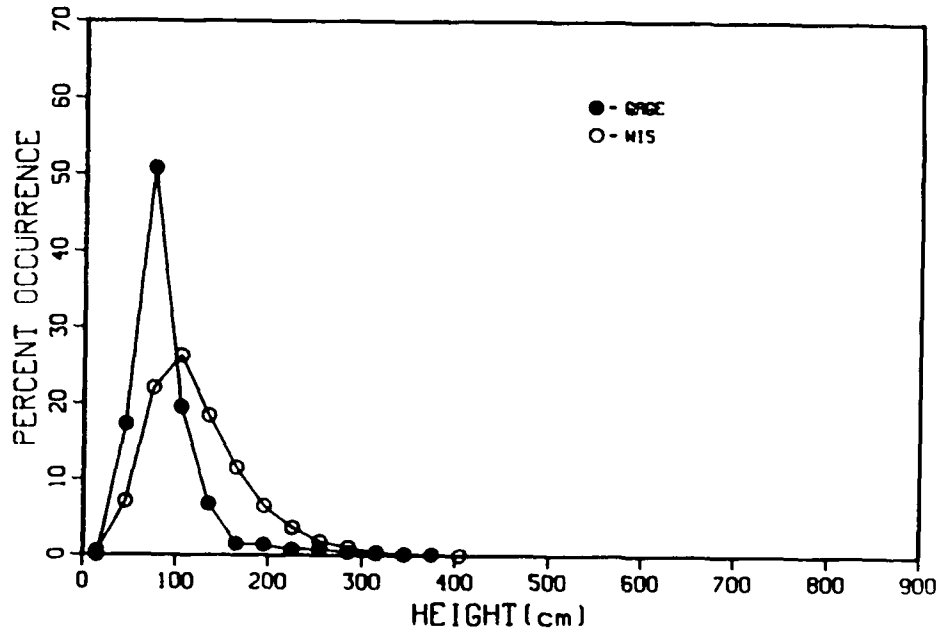
No. Obs: WIS 58,440; CDIP 1,215
Years: WIS 1956-75; CDIP 1981



ENERGY BASED WAVE HEIGHT COMPARISON SANTA CRUZ CANYON BUOY (CDIP vs WIS STA 41)

Water Depth: 366.0m
Bin Width: 30cm

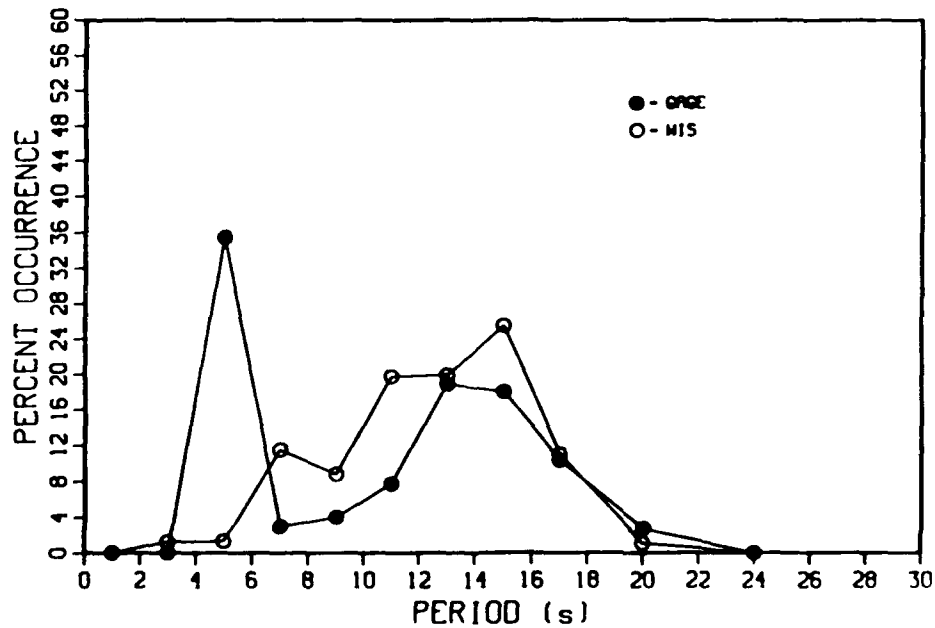
No. Obs: WIS 58,440; CDIP 774
Years: WIS 1956-75; CDIP 1988



PEAK SPECTRAL PERIOD COMPARISON SANTA CRUZ CANYON BUOY (CDIP vs WIS STA 41)

Water Depth: 366.0m
Bin Width: 2 sec

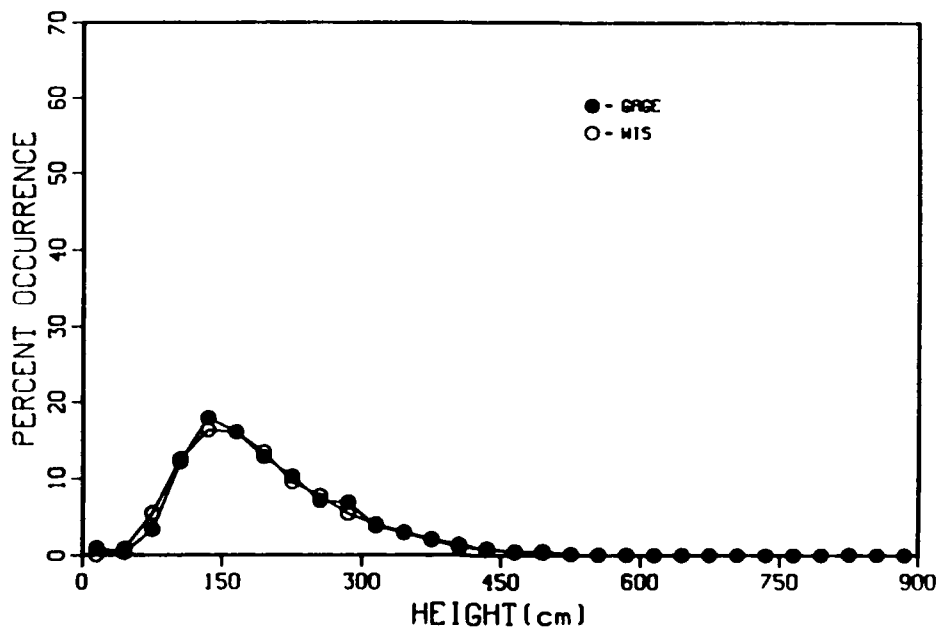
No. Obs: WIS 58,440; CDIP 744
Years: WIS 1956-75; CDIP 1988



ENERGY BASED WAVE HEIGHT COMPARISON HARVEST PLATFORM (COIP vs WIS STA 29)

Water Depth: 204.0m
Bin Width: 30cm

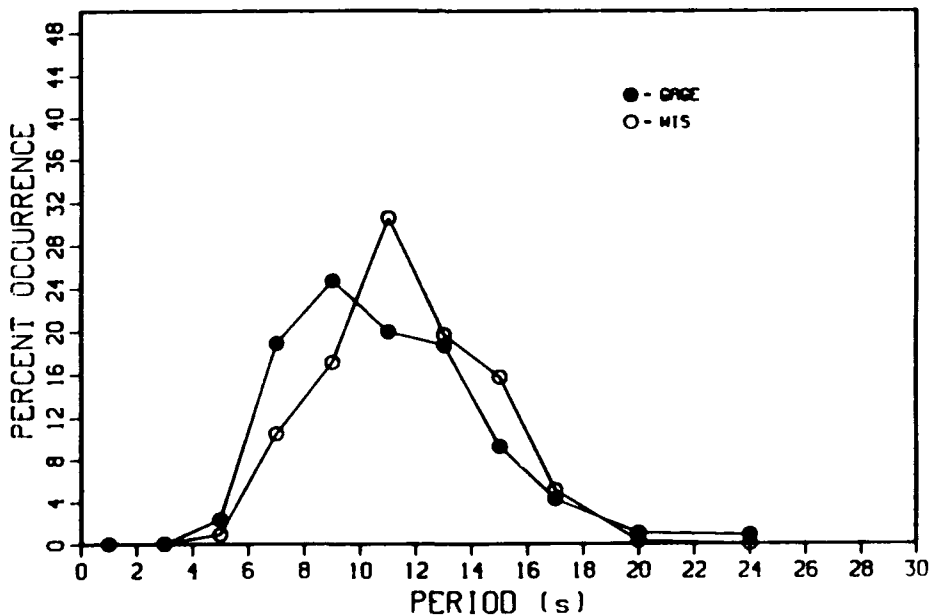
No. Obs: WIS 58,440; COIP 2,755
Years: WIS 1956-75; COIP 1987,88



PEAK SPECTRAL PERIOD COMPARISON HARVEST PLATFORM (COIP vs WIS STA 29)

Water Depth: 204.0m
Bin Width: 2 sec

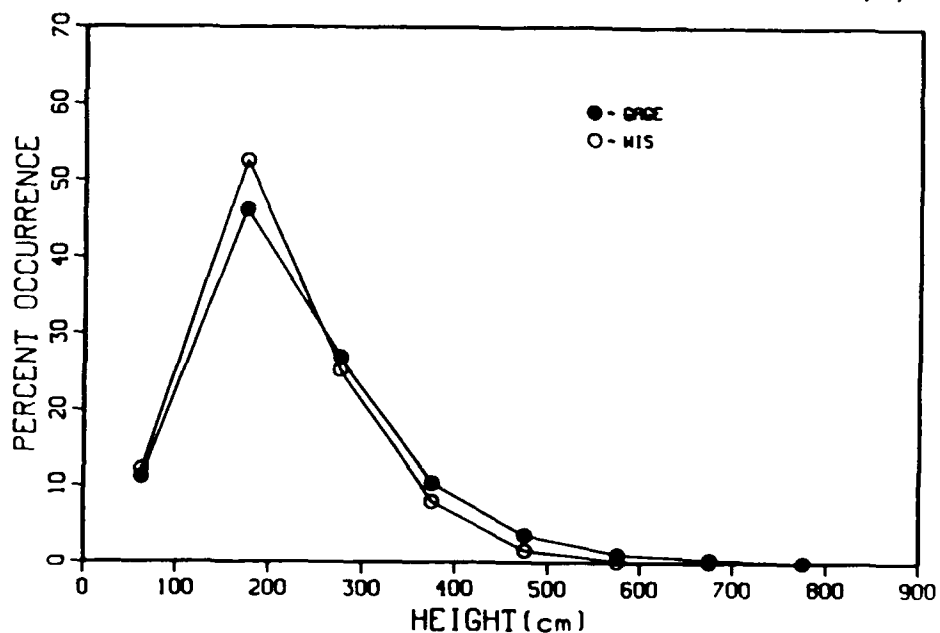
No. Obs: WIS 58,440; COIP 2,755
Years: WIS 1956-75; COIP 1987,88



ENERGY BASED WAVE HEIGHT COMPARISON 46023 (NDBC vs WIS STA 44)

Water Depth: 622.0m
Bin Width: 100cm

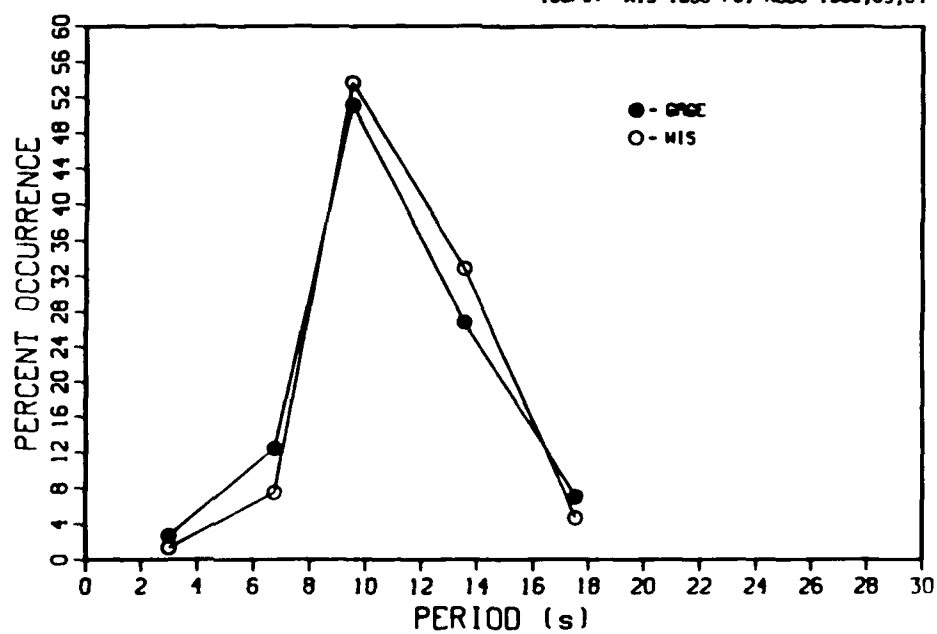
No. Obs: WIS 58,440; NDBC 20,982
Years: WIS 1956-75; NDBC 1982,83,84



PEAK SPECTRAL PERIOD COMPARISON STATION 46023 (NDBC vs WIS STA 44)

Water Depth: 622.0m
Bin Width: variable

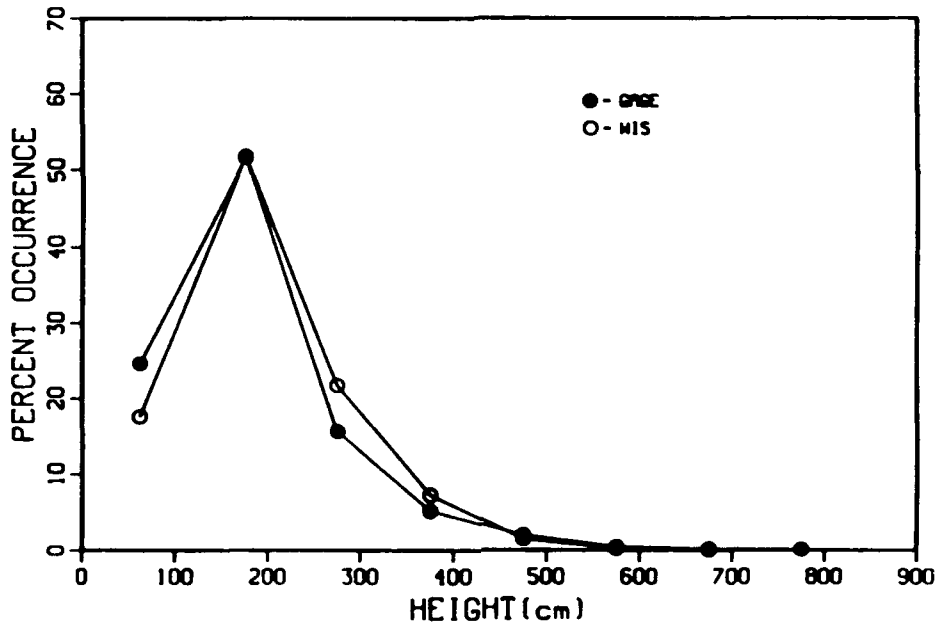
No. Obs: WIS 58,440; NDBC 20,982
Years: WIS 1956-75; NDBC 1982,83,84



ENERGY BASED WAVE HEIGHT COMPARISON STATION 46024 (NOBC vs WIS STA 46)

Water Depth: 1,390.0m
Bin Width: 100cm

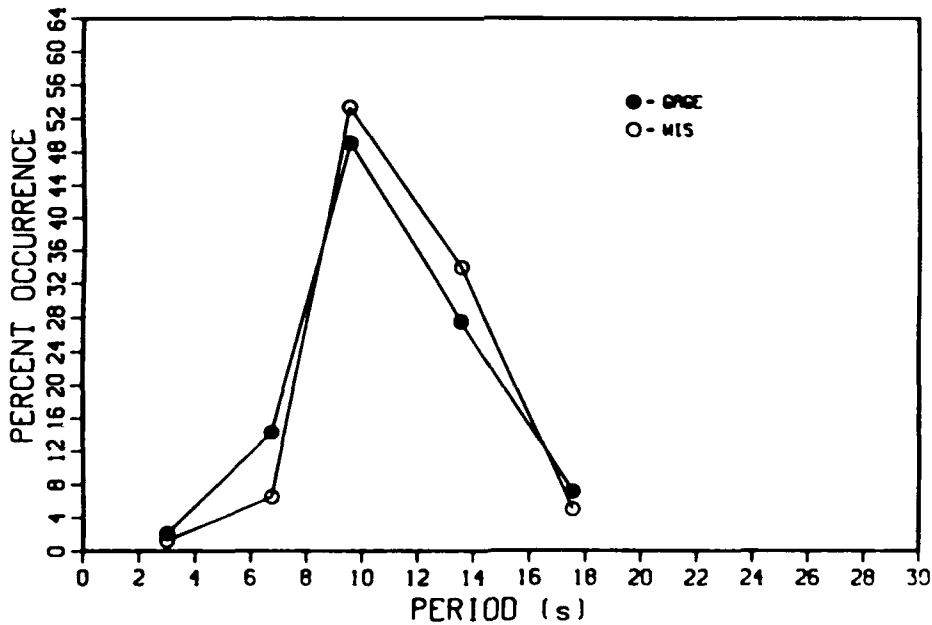
No. Obs: WIS 58,440; NOBC 17,861
Years: WIS 1956-75; NOBC 1982,83,84



PEAK SPECTRAL PERIOD COMPARISON STATION 46024 (NOBC vs WIS STA 46)

Water Depth: 1,390.0m
Bin Width: variable

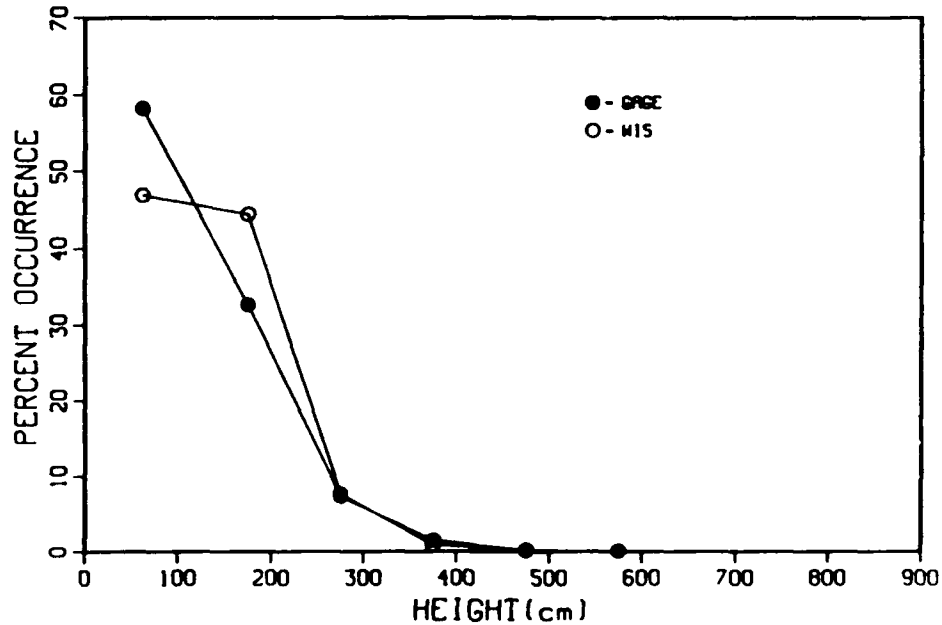
No. Obs: WIS 58,440; NOBC 17,861
Years: WIS 1956-75; NOBC 1982,83,84



ENERGY BASED WAVE HEIGHT COMPARISON STATION 46025 (NOBC vs WIS STA 38)

Water Depth: 839.0m
Bin Width: 30cm

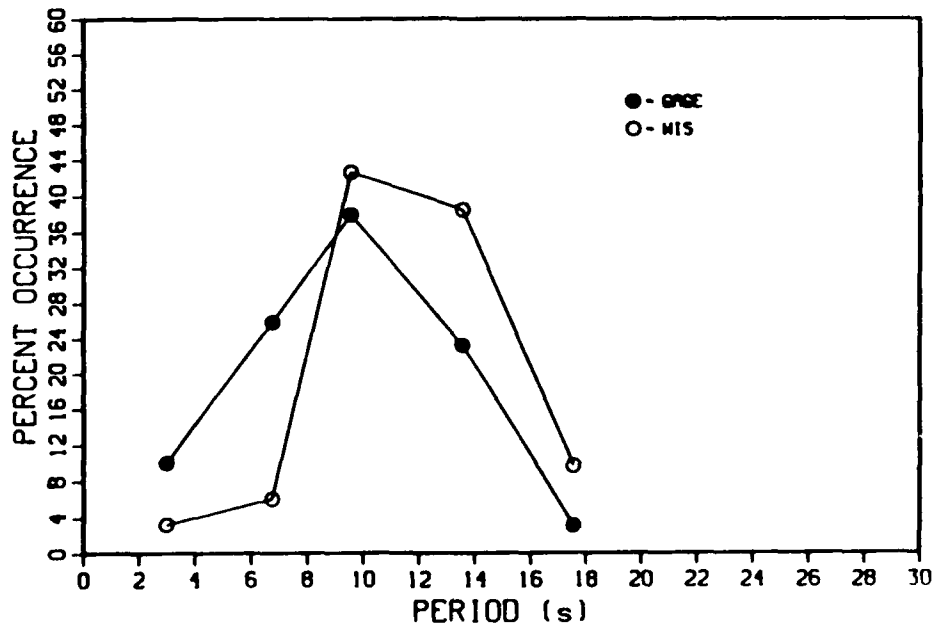
No. Obs: WIS 58,440; NOBC 20,985
Years: WIS 1956-75; NOBC 1982,83,84



PEAK SPECTRAL PERIOD COMPARISON STATION 46025 (NOBC vs WIS STA 38)

Water Depth: 839.0m
Bin Width: 2 sec

No. Obs: WIS 58,440; NOBC 20,985
Years: WIS 1956-75; NOBC 1982,83,84

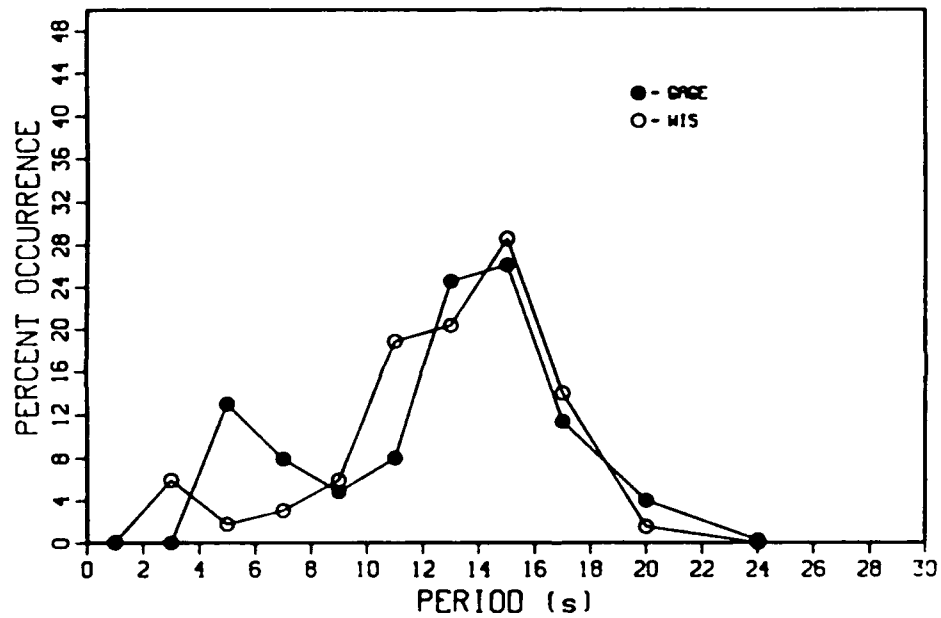


APPENDIX B: COMPARISON OF NEARSHORE DATA TO WIS DATA

PEAK SPECTRAL PERIOD COMPARISON
SUNSET BEACH (COIP vs WIS STA 14)

Water Depth: 8.2m
Bin Width: 2 sec

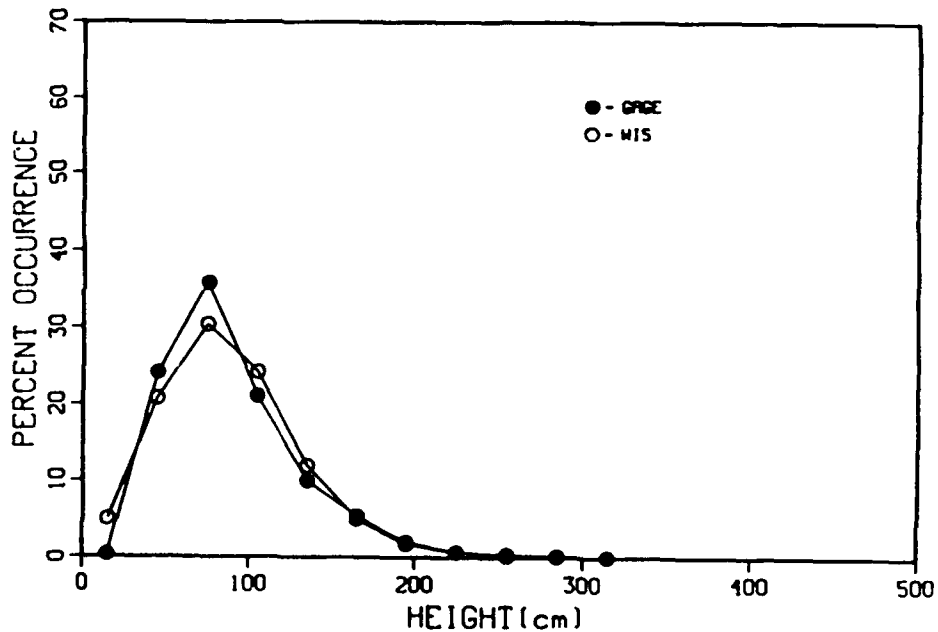
No. Obs: WIS 58,110; COIP 6,926
Years: WIS 1956-75; COIP 1981,82,86,87,88



ENERGY BASED WAVE HEIGHT COMPARISON CHANNEL ISLANDS (CDIP vs WIS STA 23)

Water Depth: 6.0m
Bin Width: 30cm

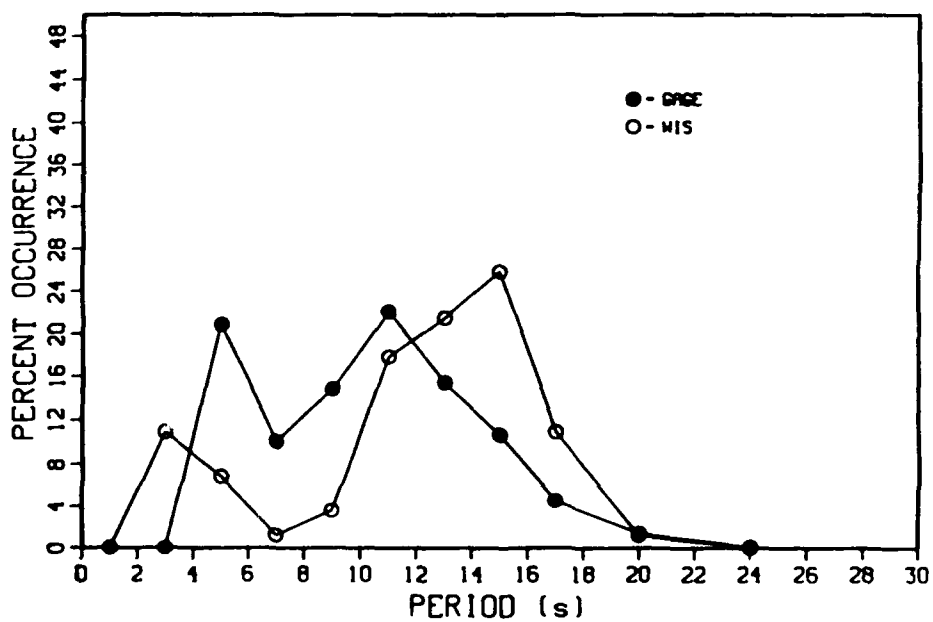
No. Obs: WIS 58,440; CDIP 5,383
Years: WIS 1956-75; CDIP 1980,81,82,83



PEAK SPECTRAL PERIOD COMPARISON CHANNEL ISLANDS (CDIP vs WIS STA 23)

Water Depth: 6.0m
Bin Width: 2 sec

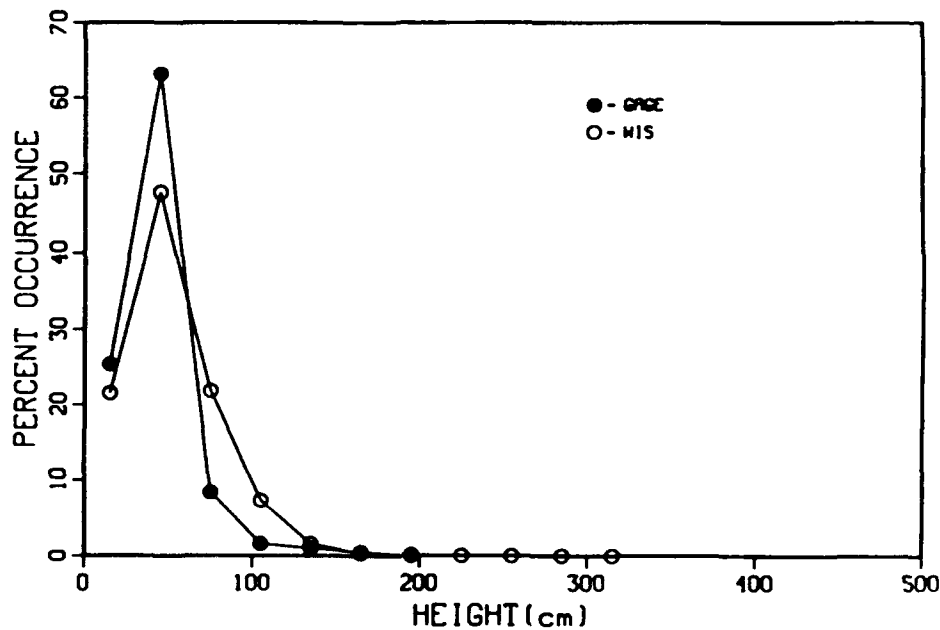
No. Obs: WIS 58,440; CDIP 5,383
Years: WIS 1956-75; CDIP 1980,81,82,83



ENERGY BASED WAVE HEIGHT COMPARISON SANTA BARBARA POINT (CDIP vs WIS STA 26)

Water Depth: 9.0m
Bin Width: 30cm

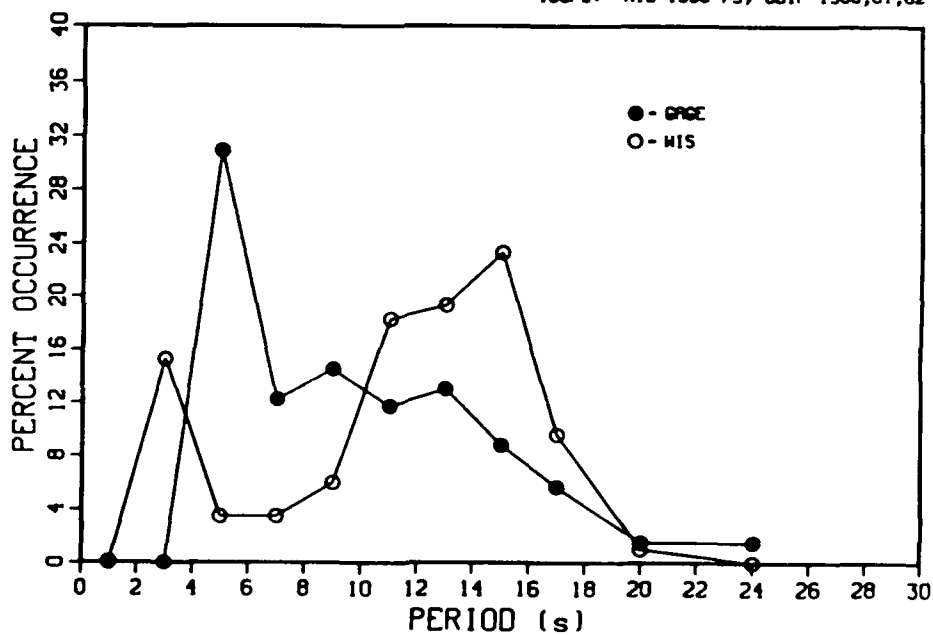
No. Obs: WIS 58,440; CDIP 4,000
Years: WIS 1956-75; CDIP 1980,81,82



PEAK SPECTRAL PERIOD COMPARISON SANTA BARBARA POINT (CDIP vs WIS STA 26)

Water Depth: 9.0m
Bin Width: 2 sec

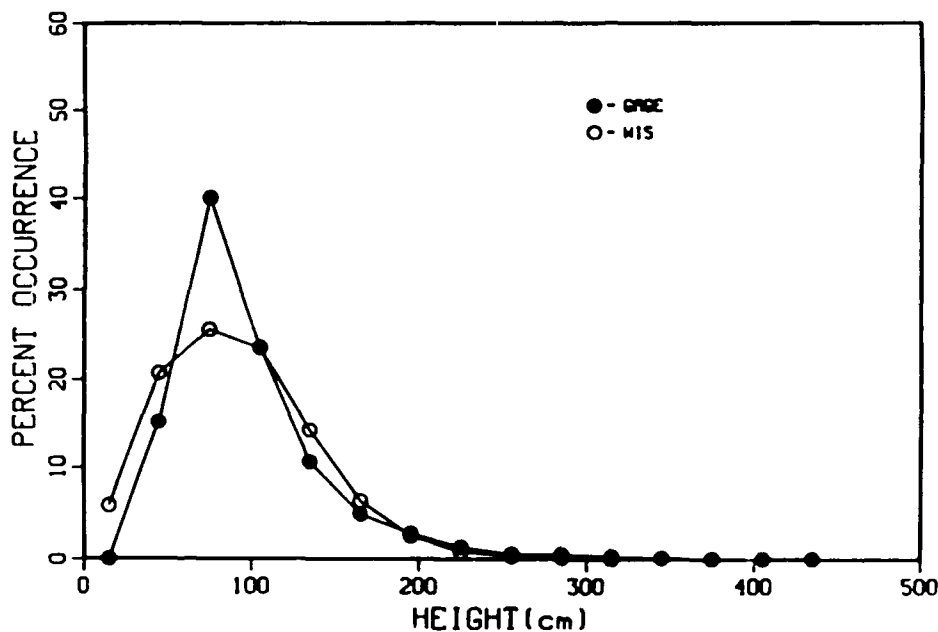
No. Obs: WIS 58,440; CDIP 4,000
Years: WIS 1956-75; CDIP 1980,81,82



ENERGY BASED WAVE HEIGHT COMPARISON MISSION BAY ENTRANCE (CDIP vs WIS STA 4)

Water Depth: 10.0m
Bin Width: 30cm

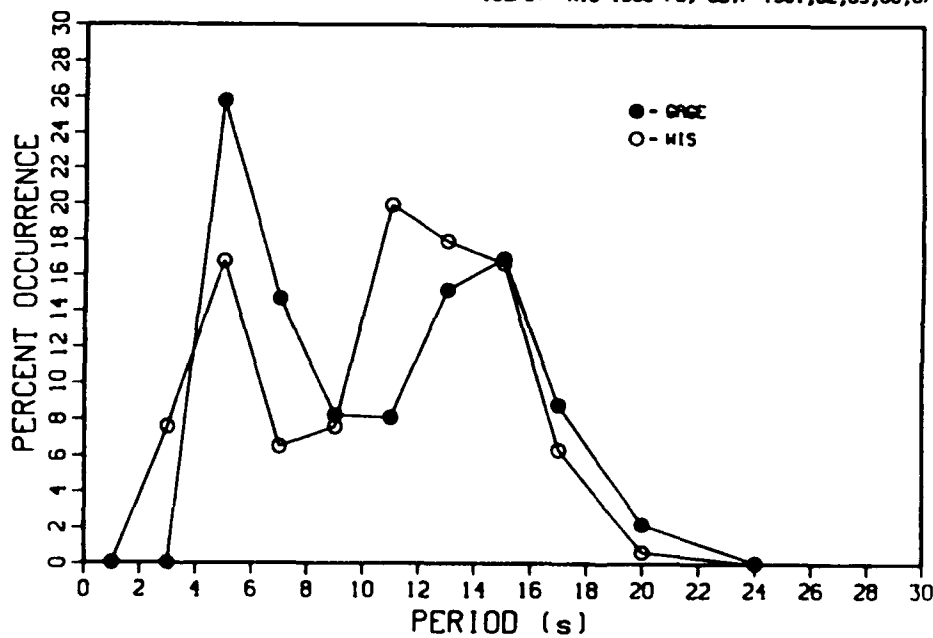
No. Obs: WIS 58,440; CDIP 6,919
Years: WIS 1956-75; CDIP 1981,82,85,86,87



PEAK SPECTRAL PERIOD COMPARISON MISSION BAY ENTRANCE (CDIP vs WIS STA 4)

Water Depth: 10.0m
Bin Width: 2 sec

No. Obs: WIS 58,440; CDIP 6,919
Years: WIS 1956-75; CDIP 1981,82,85,86,87

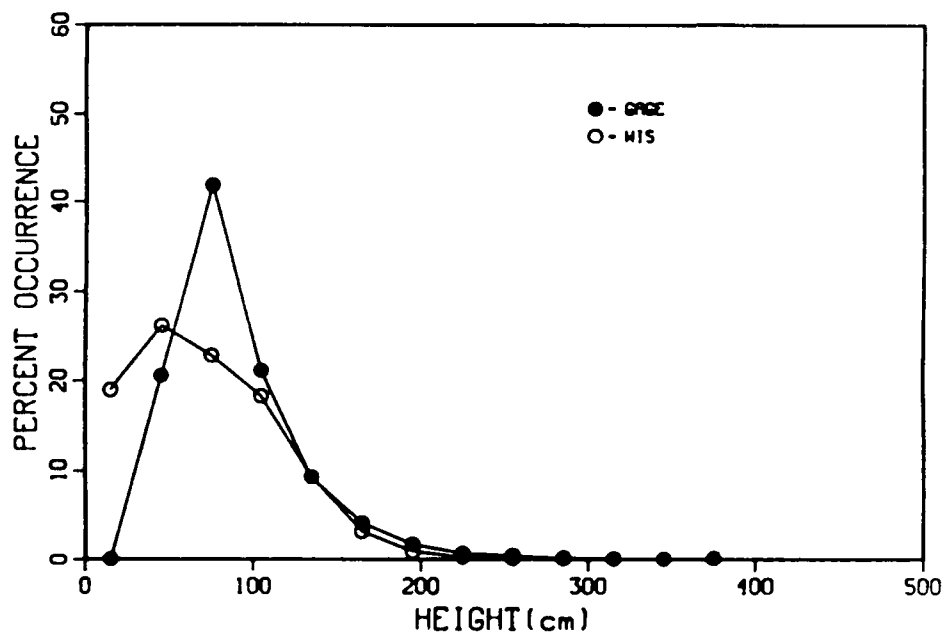


ENERGY BASED WAVE HEIGHT COMPARISON

DEL MAR (COIP vs WIS STA 6)

Water Depth: 10.7m
Bin Width: 30cm

No. Obs: WIS 58,440; COIP 5,622
Years: WIS 1956-75; COIP 1984,85,86,87

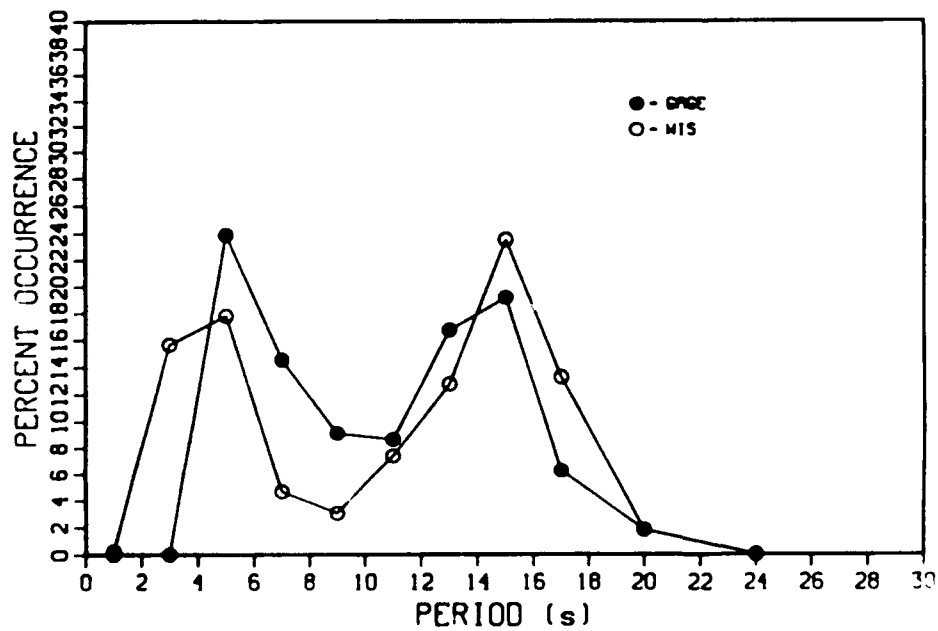


PEAK SPECTRAL PERIOD COMPARISON

DEL MAR (COIP vs WIS STA 6)

Water Depth: 10.7m
Bin Width: 2 sec

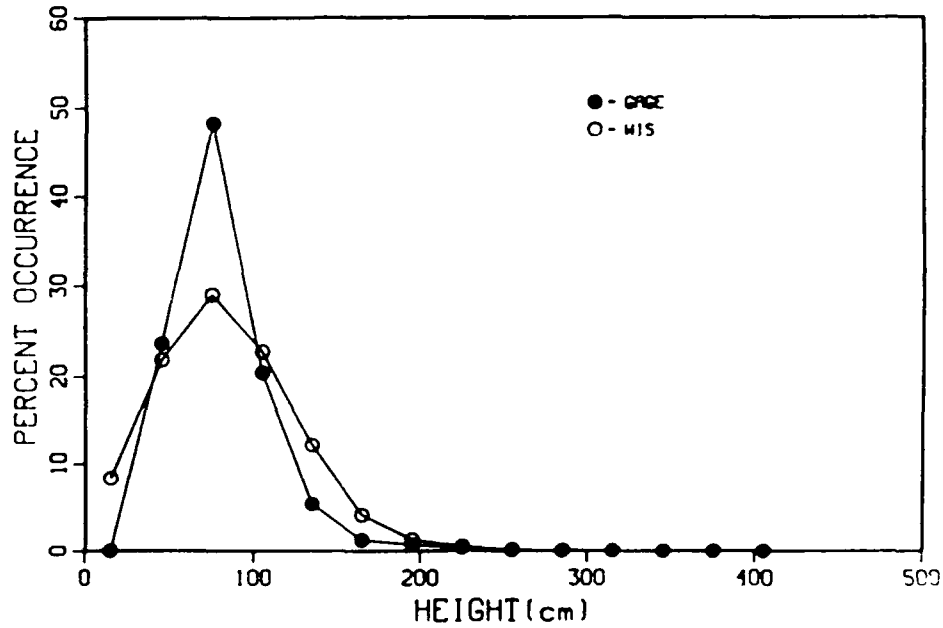
No. Obs: WIS 58,440; COIP 5,622
Years: WIS 1956-75; COIP 1984,85,86,87



ENERGY BASED WAVE HEIGHT COMPARISON OCEANSIDE (CDIP vs WIS STA 7)

Water Depth: 9.1m
Bin Width: 30cm

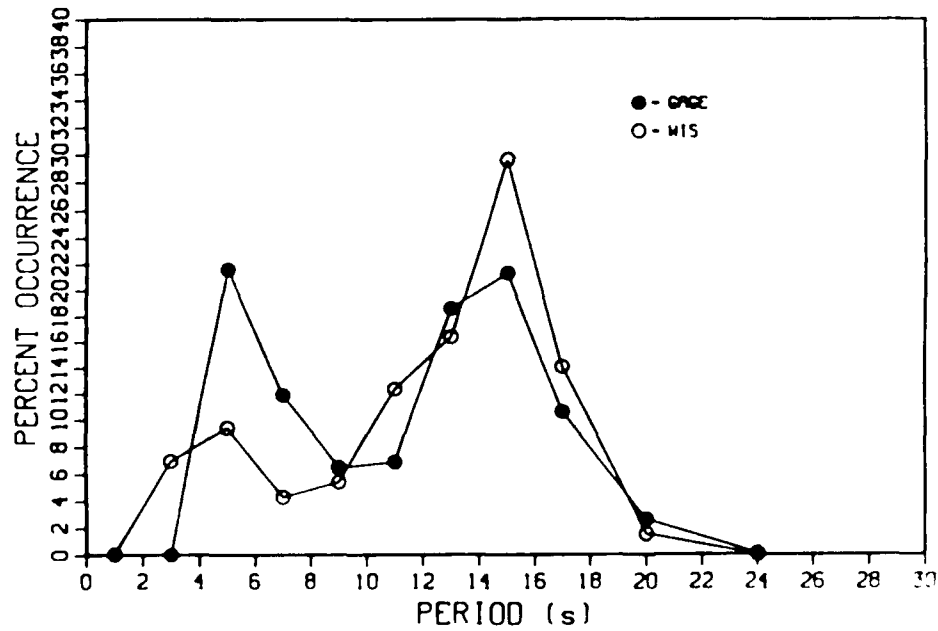
No. Obs: WIS 58,440; CDIP 5,512
Years: WIS 1956-75; CDIP 1984,85,86,87



PEAK SPECTRAL PERIOD COMPARISON OCEANSIDE (CDIP vs WIS STA 7)

Water Depth: 9.1m
Bin Width: 2 sec

No. Obs: WIS 58,440; CDIP 5,512
Years: WIS 1956-75; CDIP 1984,85,86,87

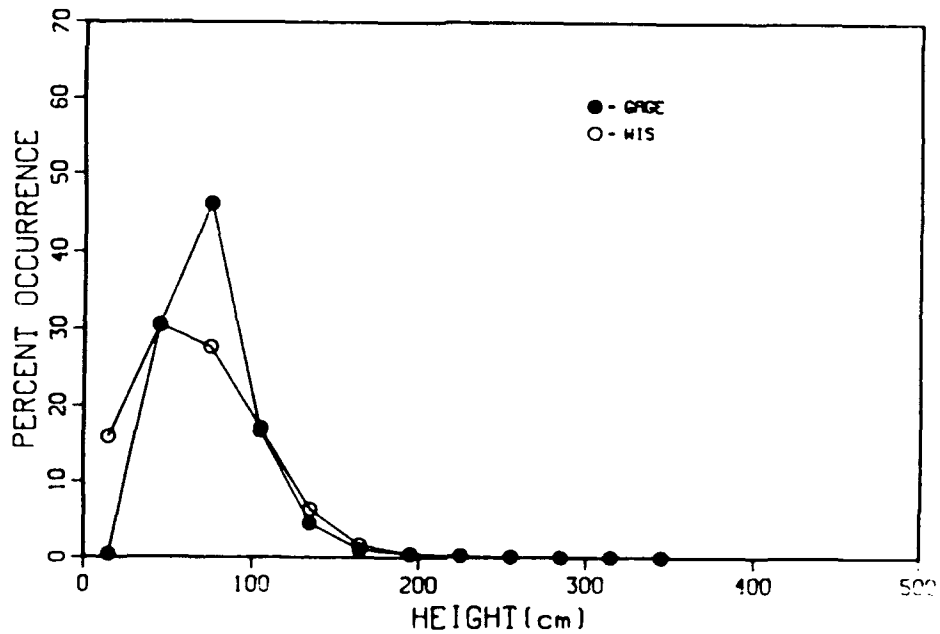


ENERGY BASED WAVE HEIGHT COMPARISON

SAN CLEMENTE (CDIP vs WIS STA 9)

Water Depth: 10.2m
Bin Width: 30cm

No. Obs: WIS 58,440; CDIP 5,563
Years: WIS 1956-75; CDIP 1984,85,86,87

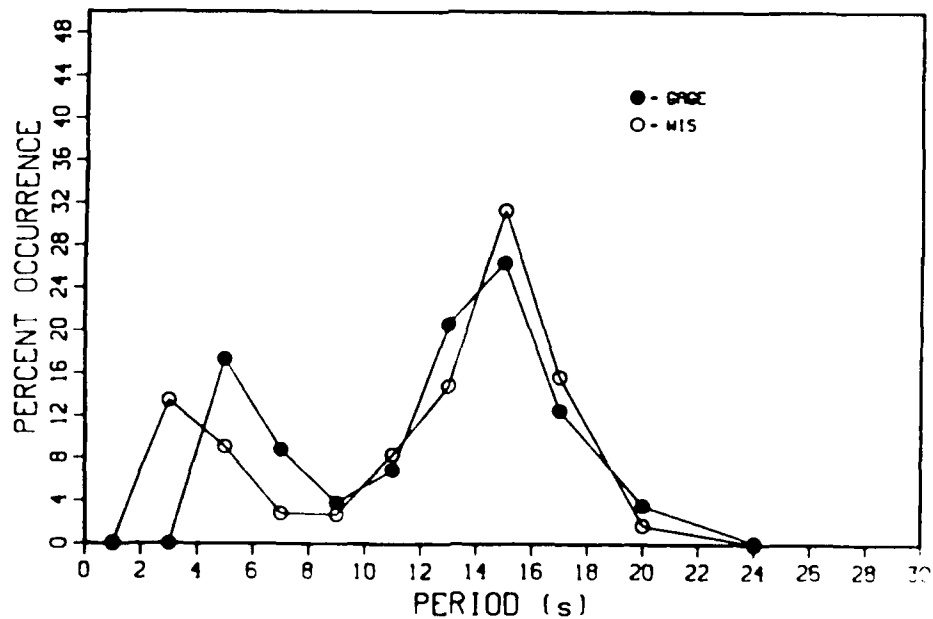


PEAK SPECTRAL PERIOD COMPARISON

SAN CLEMENTE (CDIP vs WIS STA 9)

Water Depth: 10.2m
Bin Width: 2 sec

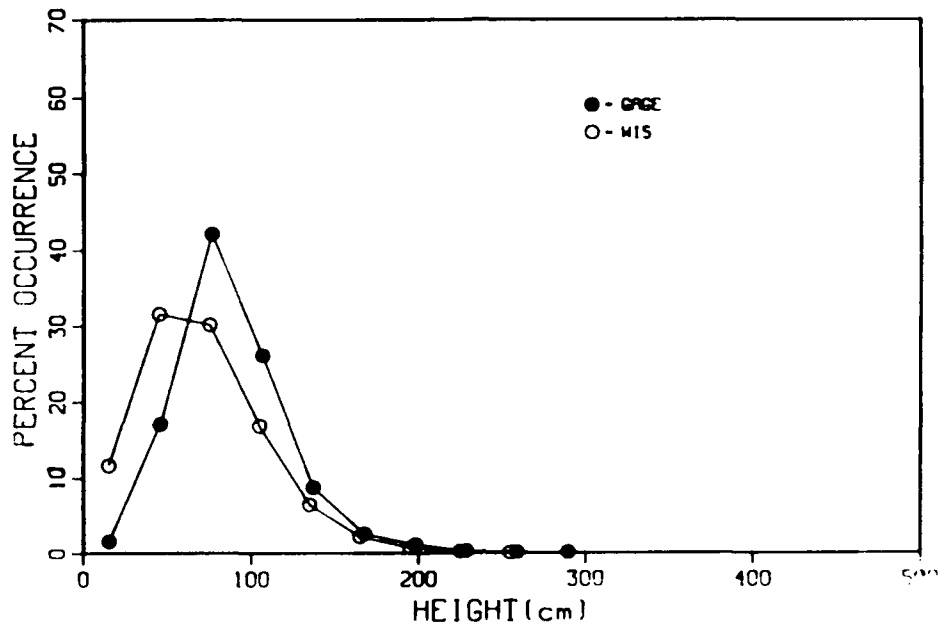
No. Obs: WIS 58,440; CDIP 5,563
Years: WIS 1956-75; CDIP 1984,85,86,87



ENERGY BASED WAVE HEIGHT COMPARISON HUNTINGTON BEACH (GAGE vs WIS STA 14)

Water Depth: 9.1m
Bin Width: 30cm

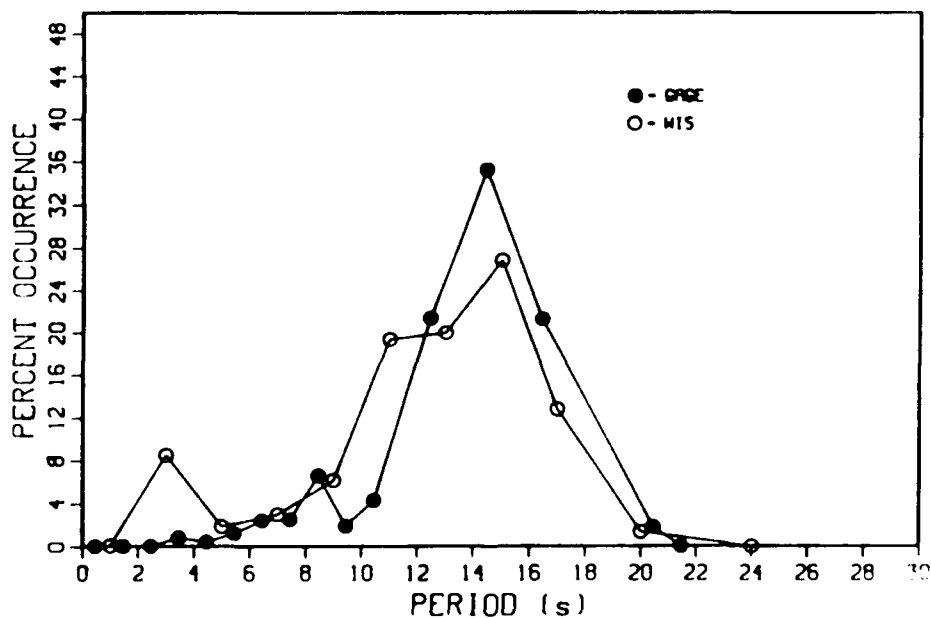
No. Obs: WIS 58,440; GAGE 2,888
Years: WIS 1956-75; GAGE 1972,73,74



PEAK SPECTRAL PERIOD COMPARISON HUNTINGTON BEACH (GAGE vs WIS STA 14)

Water Depth: 9.1m
Bin Width: 2 sec

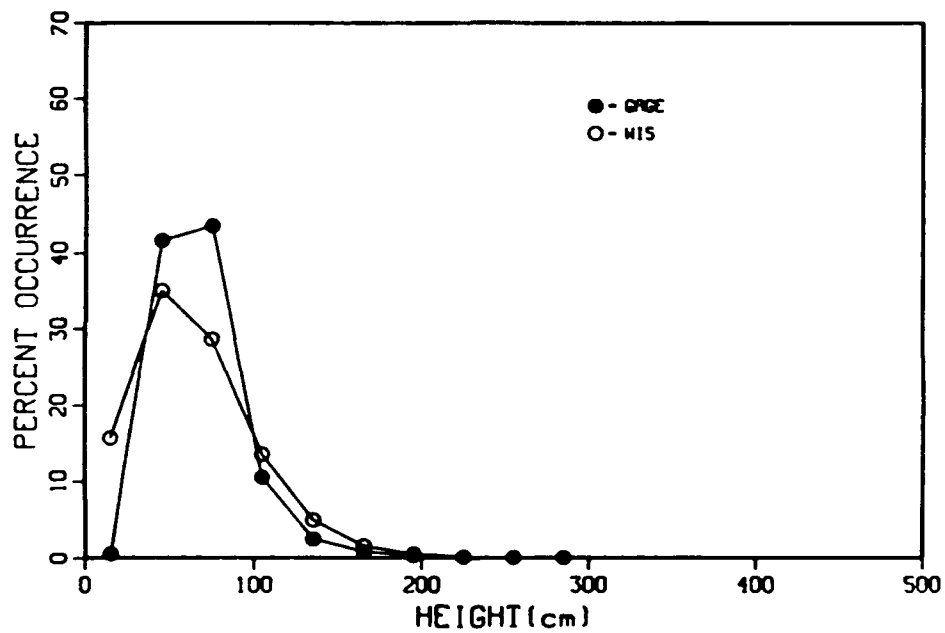
No. Obs: WIS 58,440; GAGE 2,888
Years: WIS 1956-75; GAGE 1972,73,74



ENERGY BASED WAVE HEIGHT COMPARISON
SUNSET BEACH (CDIP vs WIS STA 14)

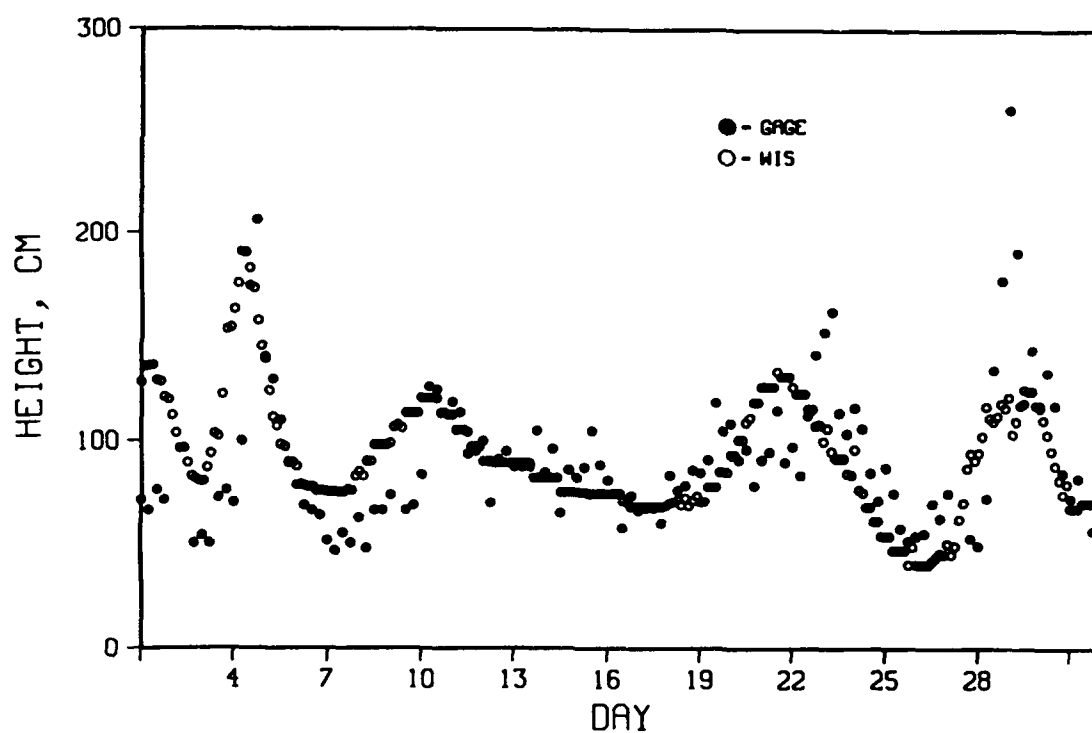
Water Depth: 8.2m
Bin Width: 30cm

No. Obs: WIS 58,140; CDIP 6,926
Years: WIS 1956-75; CDIP 1981,82,86,87,88

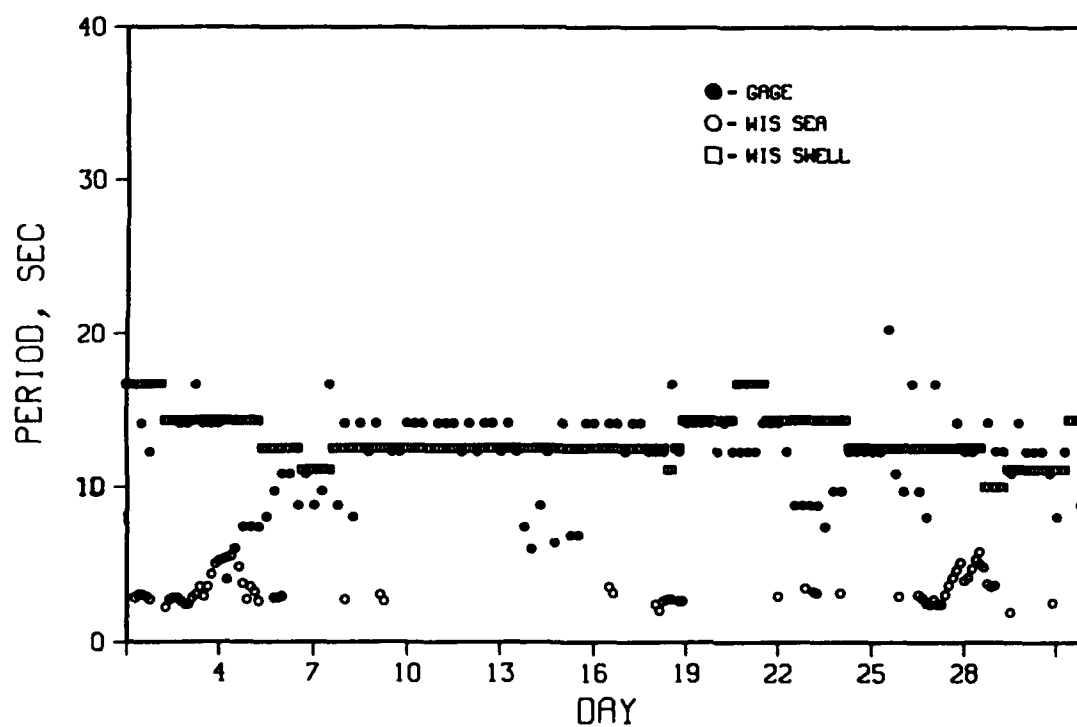


APPENDIX C: TIME SERIES COMPARISON OF GAGE DATA TO WIS DATA

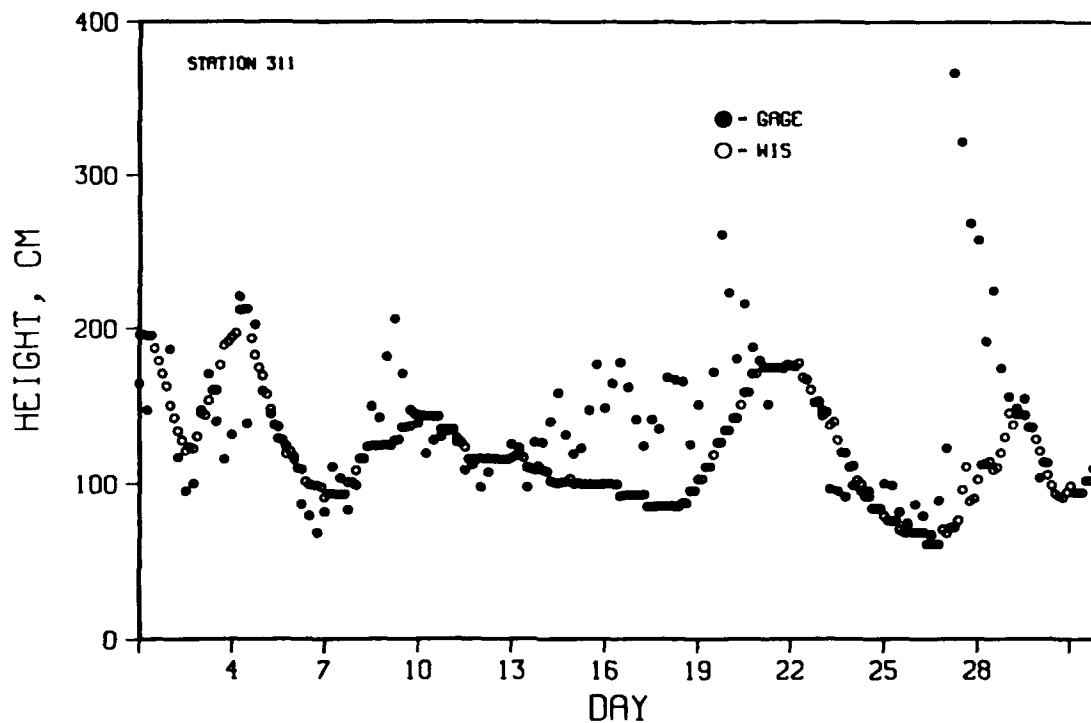
HUNTINGTON BEACH DECEMBER, 1974



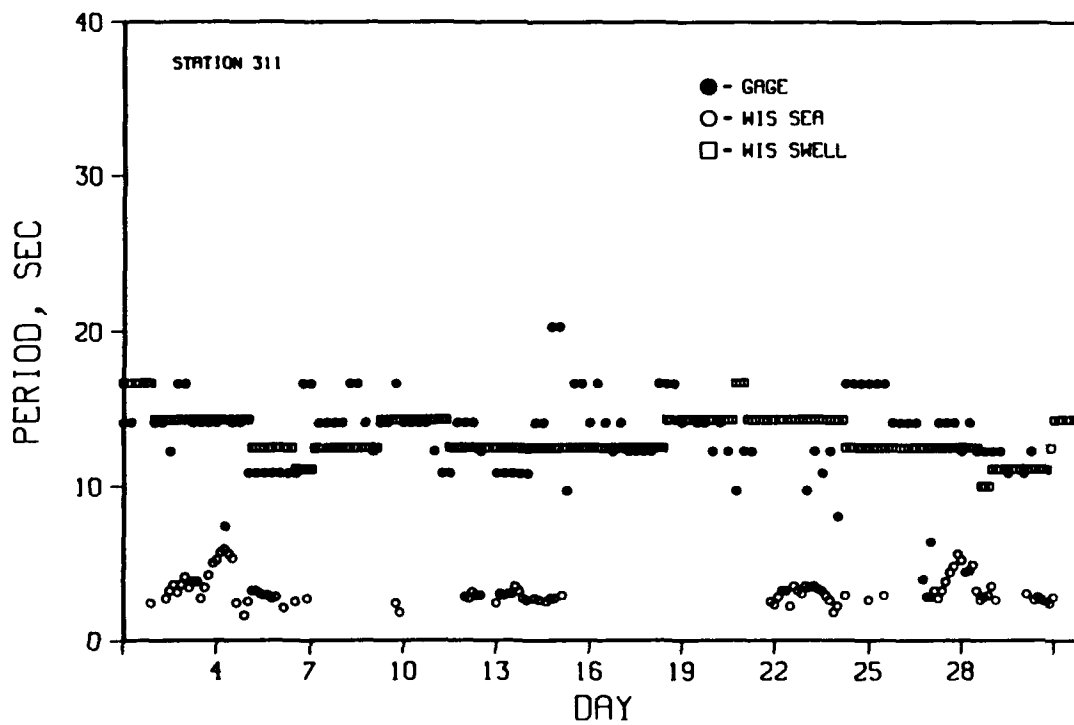
HUNTINGTON BEACH DECEMBER, 1974



CHANNEL ISLANDS DECEMBER, 1974



CHANNEL ISLANDS DECEMBER, 1974



APPENDIX D: SUMMARY OF WIS RESULTS FOR STATIONS 1-29

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
140	140	140	0	0	0	0	0	0	0	0	0	0	140
130	130	130	0	0	0	0	0	0	0	0	0	0	130
120	120	120	0	0	0	0	0	0	0	0	0	0	120
110	110	110	0	0	0	0	0	0	0	0	0	0	110
100	100	100	0	0	0	0	0	0	0	0	0	0	100
90	90	90	0	0	0	0	0	0	0	0	0	0	90
80	80	80	0	0	0	0	0	0	0	0	0	0	80
70	70	70	0	0	0	0	0	0	0	0	0	0	70
60	60	60	0	0	0	0	0	0	0	0	0	0	60
50	50	50	0	0	0	0	0	0	0	0	0	0	50
40	40	40	0	0	0	0	0	0	0	0	0	0	40
30	30	30	0	0	0	0	0	0	0	0	0	0	30
20	20	20	0	0	0	0	0	0	0	0	0	0	20
10	10	10	0	0	0	0	0	0	0	0	0	0	10
0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	184	0	0	0	0	0	0	0	0	0	0	0	184
MEAN HS(M) =	0.4	LARGEST HS(M) =	0.7	MEAN TP(SEC) =	2.6	NO. OF CASES =	108.						

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	27	.	.	.	.	.	.	.	.	.	.	27
95	46	.	.	.	.	.	.	.	.	.	.	46
90	23	.	.	.	.	.	.	.	.	.	.	23
85	1	.	5	.	.	.	.	.	.	.	.	1
80	.	.	.	.	.	.	.	.	.	.	.	.
75	.	.	.	.	.	.	.	.	.	.	.	.
70	.	.	.	.	.	.	.	.	.	.	.	.
65	.	.	.	.	.	.	.	.	.	.	.	.
60	.	.	.	.	.	.	.	.	.	.	.	.
55	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.
45	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.
35	.	.	.	.	.	.	.	.	.	.	.	.
30	.	.	.	.	.	.	.	.	.	.	.	.
25	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.
15	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	97	6	0	0	0	0	0	0	0	0	0	62	
MEAN HS(M) = 0.8		LARGEST HS(M) = 2.1		MEAN TP(SEC) = 3.2		NO. OF CASES = 62.							

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL		
		<4.4 6.0	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6-10.5 10.5	10.6-11.7 11.7	11.8-13.3 13.3	13.4-15.3 15.3	15.4-18.1 18.1	18.2-22.2 22.2	22.3- LONGER	
0.	-	.	.	.	.	.	.	.	.	.	.	.	6
0.5	-	.	.	.	.	.	.	.	.	.	.	.	0
1.0	-	.	.	.	.	.	.	.	.	.	.	.	0
1.5	-	.	.	.	.	.	.	.	.	.	.	.	0
2.0	-	.	.	.	.	.	.	.	.	.	.	.	0
2.5	-	.	.	.	.	.	.	.	.	.	.	.	0
3.0	-	.	.	.	.	.	.	.	.	.	.	.	0
3.5	-	.	.	.	.	.	.	.	.	.	.	.	0
4.0	-	.	.	.	.	.	.	.	.	.	.	.	0
4.5	-	.	.	.	.	.	.	.	.	.	.	.	0
5.0	+ .	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		6	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.2		LARGEST HS(M) = 0.4		MEAN TP(SEC) = 1.5		NO. OF CASES = 4.							

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	3	.	.	.	.	.	.	.	.	.	.	.	3	
0.1	.	.	.	.	.	.	.	.	.	.	.	.	.
0.2	.	.	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.	.
1.1	.	.	.	.	.	.	.	.	.	.	.	.	.
1.2	.	.	.	.	.	.	.	.	.	.	.	.	.
1.3	.	.	.	.	.	.	.	.	.	.	.	.	.
1.4	.	.	.	.	.	.	.	.	.	.	.	.	.
1.5	.	.	.	.	.	.	.	.	.	.	.	.	.
1.6	.	.	.	.	.	.	.	.	.	.	.	.	.
1.7	.	.	.	.	.	.	.	.	.	.	.	.	.
1.8	.	.	.	.	.	.	.	.	.	.	.	.	.
1.9	.	.	.	.	.	.	.	.	.	.	.	.	.
2.0	.	.	.	.	.	.	.	.	.	.	.	.	.
2.1	.	.	.	.	.	.	.	.	.	.	.	.	.
2.2	.	.	.	.	.	.	.	.	.	.	.	.	.
2.3	.	.	.	.	.	.	.	.	.	.	.	.	.
2.4	.	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.	.
2.6	.	.	.	.	.	.	.	.	.	.	.	.	.
2.7	.	.	.	.	.	.	.	.	.	.	.	.	.
2.8	.	.	.	.	.	.	.	.	.	.	.	.	.
2.9	.	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	3	0	0	0	0	0	0	0	0	0	0	0		
MEAN HS(M) = 0.0		LARGEST HS(M) = 0.1		MEAN TP(SEC) = 0.7		NO. OF CASES =		2.						

HEIGHT(METERS)				PERIOD(SECONDS)								TOTAL			
				<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	0	0	0	3	.	.	.	.	.	.	.	.	.	.	3
1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.
3	3	3	3	.	.	.	.	.	.	.	.	.	.	.	.
4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.
5	5	5	5	.	.	.	.	.	.	.	.	.	.	.	.
6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.
7	7	7	7	.	.	.	.	.	.	.	.	.	.	.	.
8	8	8	8	.	.	.	.	.	.	.	.	.	.	.	.
9	9	9	9	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
MEAN HS(M) = 0.1				LARGEST HS(M) = 0.2				MEAN TP(SEC) = 1.4				NO. OF CASES = 2.			

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	3	.	.	.	.	.	.	.	.	.	.	.	3
1	.	.	.	.	.	.	.	.	.	.	.	.	0
2	.	.	.	.	.	.	.	.	.	.	.	.	0
3	.	.	.	.	.	.	.	.	.	.	.	.	0
4	.	.	.	.	.	.	.	.	.	.	.	.	0
5	.	.	.	.	.	.	.	.	.	.	.	.	0
6	.	.	.	.	.	.	.	.	.	.	.	.	0
7	.	.	.	.	.	.	.	.	.	.	.	.	0
8	.	.	.	.	.	.	.	.	.	.	.	.	0
9	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3	0	0	2	0	0	0	0	0	0	0	0	4
MEAN HS(M) = 1.0		LARGEST HS(M) = 2.0		MEAN TP(SEC) = 5.2		NO. OF CASES =							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0												6
0.1	0												0
0.2	0												0
0.3	0												0
0.4	0												0
0.5	0												0
0.6	0												0
0.7	0												0
0.8	0												0
0.9	0												0
1.0	0												0
1.1	0												0
1.2	0												0
1.3	0												0
1.4	0												0
1.5	0												0
1.6	0												0
1.7	0												0
1.8	0												0
1.9	0												0
2.0	0												0
2.1	0												0
2.2	0												0
2.3	0												0
2.4	0												0
2.5	0												0
2.6	0												0
2.7	0												0
2.8	0												0
2.9	0												0
3.0	0												0
3.1	0												0
3.2	0												0
3.3	0												0
3.4	0												0
3.5	0												0
3.6	0												0
3.7	0												0
3.8	0												0
3.9	0												0
4.0	0												0
4.1	0												0
4.2	0												0
4.3	0												0
4.4	0												0
4.5	0												

[illegible]

STATION 1 32.33N 117.12W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	49	403	1078	749	260	186	32	23		5		2785
0.5-0.99	27	773	6100	4072	2455	2992	5143	1570	15	5		18280
1.0-1.49		431	6836	3167	2871	5195	1453	2807	77			25030
1.5-1.99		39	3442	2688	1240	2710	5208	2866	268			18466
2.0-2.49			516	1279	412	561	2203	2085	450			7506
2.5-2.99			41	340	229	92	473	271	268			2214
3.0-3.49			6	32	30	35	54	205	88			450
3.5-3.99				3	3	5	3	39	22			75
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
5.5-5.99												0
6.0+												0
TOTAL	76	1646	18019	12330	7500	11776	14611	7566	1188	14	0	

MEAN HS(M) = 1.3 LARGEST HS(M) = 3.8 MEAN TP(SEC) = 10.2 NO. OF CASES = 43688.

STATION 1 32.33N 117.12W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	66	155	1009	1678	165	18						3091
0.5-0.99	71	564	2193	5773	2489	713	18					11821
1.0-1.49	6	597	1218	2034	1940	777	154					6926
1.5-1.99		37	408	80	207	242	30					1004
2.0-2.49			30	11		10	3					54
2.5-2.99			1	1			1					2
3.0-3.49												1
3.5-3.99				1								1
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
5.5-5.99												0
6.0+												0
TOTAL	143	1353	4859	9578	4801	1960	206	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.6 MEAN TP(SEC) = 8.7 NO. OF CASES = 13395.

STATION 1 32.33N 117.12W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	66	8										66
0.5-0.99	61	34										95
1.0-1.49												0
1.5-1.99												0
2.0-2.49												0
2.5-2.99												0
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
5.5-5.99												0
6.0+												0
TOTAL	127	42	0	0	0	0	0	0	0	0	0	

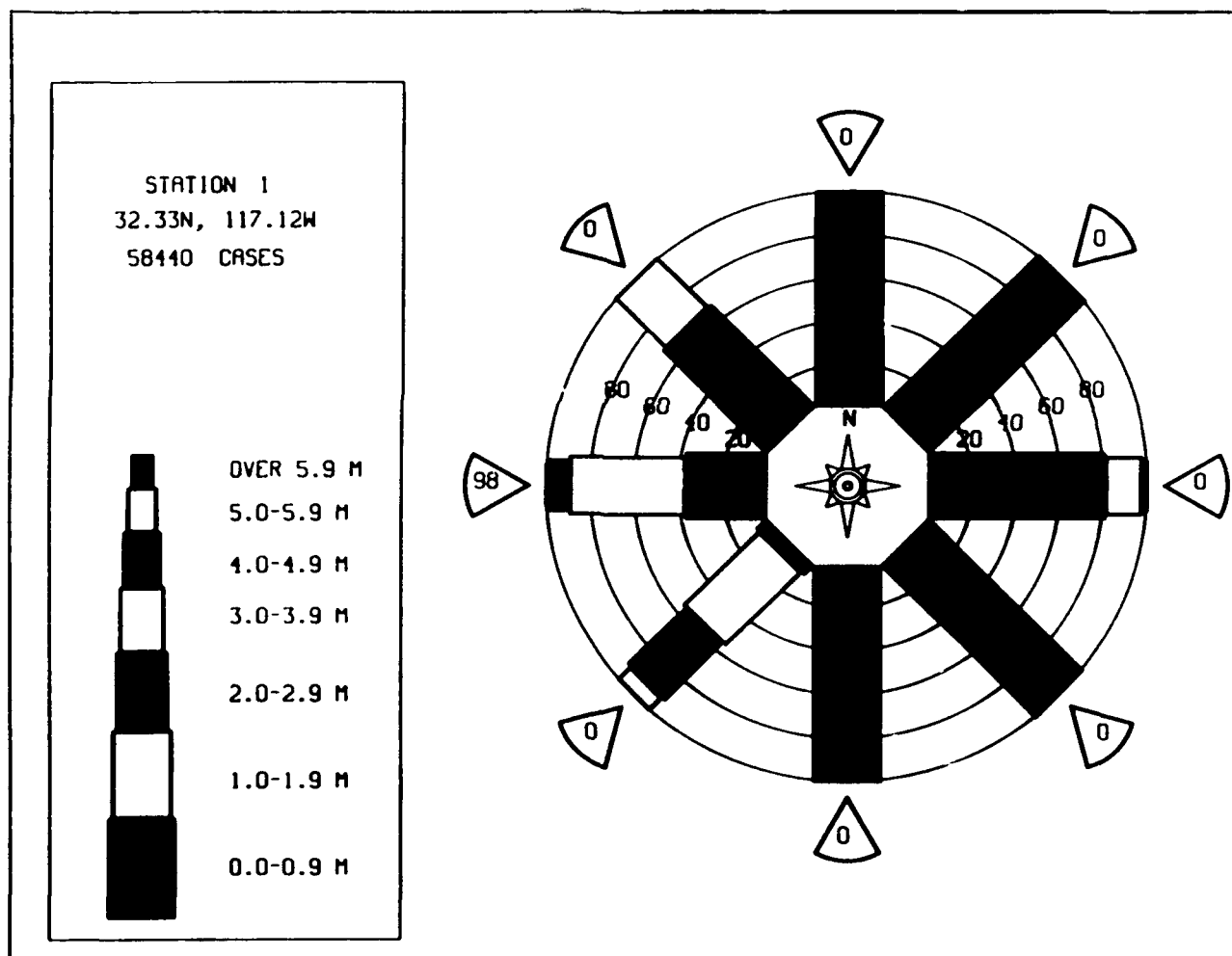
MEAN HS(M) = 0.6 LARGEST HS(M) = 1.4 MEAN TP(SEC) = 3.5 NO. OF CASES = 100.

STATION 1 32.33N 117.12W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	56	1										56
0.5-0.99	49											49
1.0-1.49												0
1.5-1.99												0
2.0-2.49												0
2.5-2.99												0
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
5.5-5.99												0
6.0+												0
TOTAL	105	2	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 3.1 NO. OF CASES = 64.

STATION 1 32 33N 117 12W FOR ALL DIRECTIONS												
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS												
HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	73	155	208	243	42	20	1	2	1	.	.	646
1.0-1.9	45	104	100	98	92	10	1	1	1	.	.	504
2.0-2.9	.	8	39	50	14	2	1	1	.	.	.	222
3.0-3.9	.	.	6	13	24	15	1	2	.	.	.	181
4.0-4.9	.	.	1	4	16	17	5	0	.	.	.	75
5.0-5.9	.	.	.	5	3	3	1	4	.	.	.	40
6.0-6.9	0
7.0-7.9	0
8.0-8.9	0
9.0-9.9	0
10.0-10.9	0
11.0-11.9	0
12.0-12.9	0
13.0-13.9	0
14.0-14.9	0
15.0-15.9	0
16.0-16.9	0
17.0-17.9	0
18.0-18.9	0
19.0-19.9	0
20.0-20.9	0
21.0-21.9	0
22.0-22.9	0
23.0-23.9	0
24.0-24.9	0
25.0-25.9	0
26.0-26.9	0
27.0-27.9	0
28.0-28.9	0
29.0-29.9	0
30.0-30.9	0
31.0-31.9	0
32.0-32.9	0
33.0-33.9	0
34.0-34.9	0
35.0-35.9	0
36.0-36.9	0
37.0-37.9	0
38.0-38.9	0
39.0-39.9	0
40.0-40.9	0
41.0-41.9	0
42.0-42.9	0
43.0-43.9	0
44.0-44.9	0
45.0-45.9	0
46.0-46.9	0
47.0-47.9	0
48.0-48.9	0
49.0-49.9	0
50.0-50.9	0
51.0-51.9	0
52.0-52.9	0
53.0-53.9	0
54.0-54.9	0
55.0-55.9	0
56.0-56.9	0
57.0-57.9	0
58.0-58.9	0
59.0-59.9	0
60.0-60.9	0
61.0-61.9	0
62.0-62.9	0
63.0-63.9	0
64.0-64.9	0
65.0-65.9	0
66.0-66.9	0
67.0-67.9	0
68.0-68.9	0
69.0-69.9	0
70.0-70.9	0
71.0-71.9	0
72.0-72.9	0
73.0-73.9	0
74.0-74.9	0
75.0-75.9	0
76.0-76.9	0
77.0-77.9	0
78.0-78.9	0
79.0-79.9	0
80.0-80.9	0
81.0-81.9	0
82.0-82.9	0
83.0-83.9	0
84.0-84.9	0
85.0-85.9	0
86.0-86.9	0
87.0-87.9	0
88.0-88.9	0
89.0-89.9	0
90.0-90.9	0
91.0-91.9	0
92.0-92.9	0
93.0-93.9	0
94.0-94.9	0
95.0-95.9	0
96.0-96.9	0
97.0-97.9	0
98.0-98.9	0
99.0-99.9	0
TOTAL	121	306	2319	2234	1240	1379	1492	759	115	0	0	
MEAN HS(M) =	1.2	LARGEST HS(M) =	3.8	MEAN TP(SEC) =	9.7	TOTAL CASES =	58440					



MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 1 (32.33N 117.12W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.5	1.6	1.5	1.4	1.2	1.2	0.9	0.7	0.8	0.9	1.2	1.6	

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 1 (32.33N 117.12W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

20 YR. STATISTICS FOR WIS STATION 1 (32.33N 117.12W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.2
MEAN PEAK WAVE PERIOD (SECONDS) =	9.7
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.6
STANDARD DEVIATION OF TP (SECONDS) =	2.6
LARGEST HS (METERS) =	3.8
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	11.1
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	267.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	64060800

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.	.	203	.	.	.	.	.	.	.	.	.	.	203
.1	.	13	.	.	.	.	.	.	.	.	.	.	13
.2	.	.	.	.	.	.	.	.	.	.	.	.	.
.3	.	.	.	.	.	.	.	.	.	.	.	.	.
.4	.	.	.	.	.	.	.	.	.	.	.	.	.
.5	.	.	.	.	.	.	.	.	.	.	.	.	.
.6	.	.	.	.	.	.	.	.	.	.	.	.	.
.7	.	.	.	.	.	.	.	.	.	.	.	.	.
.8	.	.	.	.	.	.	.	.	.	.	.	.	.
.9	.	.	.	.	.	.	.	.	.	.	.	.	.
+
TOTAL		216	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.3 LARGEST HS(M) = 0.5				MEAN TP(SEC) = 2.4				NO. OF CASES = 127.					

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	241	.	.	.	.	.	.	.	.	.	241
0.1	0	65	.	.	.	.	.	.	.	.	.	65
0.2	0	.	.	.	.	.	.	.	.	.	.	.
0.3	0	.	.	.	.	.	.	.	.	.	.	.
0.4	0	.	.	.	.	.	.	.	.	.	.	.
0.5	0	.	.	.	.	.	.	.	.	.	.	.
0.6	0	.	.	.	.	.	.	.	.	.	.	.
0.7	0	.	.	.	.	.	.	.	.	.	.	.
0.8	0	.	.	.	.	.	.	.	.	.	.	.
0.9	0	.	.	.	.	.	.	.	.	.	.	.
1.0	0	.	.	.	.	.	.	.	.	.	.	.
1.1	0	.	.	.	.	.	.	.	.	.	.	.
1.2	0	.	.	.	.	.	.	.	.	.	.	.
1.3	0	.	.	.	.	.	.	.	.	.	.	.
1.4	0	.	.	.	.	.	.	.	.	.	.	.
1.5	0	.	.	.	.	.	.	.	.	.	.	.
1.6	0	.	.	.	.	.	.	.	.	.	.	.
1.7	0	.	.	.	.	.	.	.	.	.	.	.
1.8	0	.	.	.	.	.	.	.	.	.	.	.
1.9	0	.	.	.	.	.	.	.	.	.	.	.
2.0	0	.	.	.	.	.	.	.	.	.	.	.
2.1	0	.	.	.	.	.	.	.	.	.	.	.
2.2	0	.	.	.	.	.	.	.	.	.	.	.
2.3	0	.	.	.	.	.	.	.	.	.	.	.
2.4	0	.	.	.	.	.	.	.	.	.	.	.
2.5	0	.	.	.	.	.	.	.	.	.	.	.
2.6	0	.	.	.	.	.	.	.	.	.	.	.
2.7	0	.	.	.	.	.	.	.	.	.	.	.
2.8	0	.	.	.	.	.	.	.	.	.	.	.
2.9	0	.	.	.	.	.	.	.	.	.	.	.
3.0	0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	306	0	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.3		LARGEST HS(M) = 0.8		MEAN TP(SEC) = 2.5		NO. OF CASES = 179.							

[illegible]

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 90.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	54	.	.	.	.	.	.	.	.	.	.	54
90	15	.	.	.	.	.	.	.	.	.	.	15
80	1	.	.	.	.	.	.	.	.	.	.	1
70	.	.	.	.	.	.	.	.	.	.	.	.
60	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.
30	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.
0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	170	6	0	0	0	0	0	0	0	0	0	176

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 3.1 NO. OF CASES = 105.

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 112.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	15	.	.	.	.	.	.	.	.	.	.	15
90	3	.	.	.	.	.	.	.	.	.	.	3
80	.	.	.	.	.	.	.	.	.	.	.	.
70	.	.	.	.	.	.	.	.	.	.	.	.
60	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.
30	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.
0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	18	0	0	0	0	0	0	0	0	0	0	18

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.8 MEAN TP(SEC) = 2.2 NO. OF CASES = 11.

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 135.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	8	.	.	.	.	.	.	.	.	.	.	8
90
80
70
60
50
40
30
20
10
0
TOTAL	8	0	0	0	0	0	0	0	0	0	0	8

MEAN HS(M) = 0.1 LARGEST HS(M) = 0.3 MEAN TP(SEC) = 1.6 NO. OF CASES = 5.

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 157.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	1	.	.	.	.	.	.	.	.	.	.	1
90
80
70
60
50
40
30
20
10
0
TOTAL	1	0	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.1 LARGEST HS(M) = 0.1 MEAN TP(SEC) = 1.1 NO. OF CASES = 1.

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	1												1
0.1	1												1
0.2	1												1
0.3	1												1
0.4	1												1
0.5	1												1
0.6	1												1
0.7	1												1
0.8	1												1
0.9	1												1
1.0	1												1
1.1	1												1
1.2	1												1
1.3	1												1
1.4	1												1
1.5	1												1
1.6	1												1
1.7	1												1
1.8	1												1
1.9	1												1
2.0	1												1
2.1	1												1
2.2	1												1
2.3	1												1
2.4	1												1
2.5	1												1
2.6	1												1
2.7	1												1
2.8	1												1
2.9	1												1
3.0	1												1
3.1	1												1
3.2	1												1
3.3	1												1
3.4	1												1
3.5	1												1
3.6	1												1
3.7	1												1
3.8	1												1
3.9	1												1
4.0	1												1
4.1	1												1
4.2	1												1
4.3	1												1
4.4	1												1
4.5	1												

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	29				10								39
0.1	.		23		65								98
0.2	.				77								99
0.3	.			3	85								96
0.4	.			15	41								140
0.5	.			1	66								133
0.6	.				3								20
0.7	.								17				0
0.8	.												0
0.9	.												0
TOTAL	+	29	25	186	347	165	104	92	24	0	0	0	577
MEAN HS(M) = 1.7		LARGEST HS(M) = 3.6		MEAN TP(SEC) = 9.2		NO. OF CASES = 577.							

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	78	770	2198	2082	485	249	42	29	1	5	5939
0.5-0.99	39	1230	7332	5306	3624	3723	1252	210	18	.	22734
1.0-1.49	.	504	6137	2383	2371	4955	4714	944	54	.	22062
1.5-1.99	.	37	2409	2091	621	2111	5041	2611	143	.	15064
2.0-2.49	.	.	207	970	347	470	2209	2734	282	.	7219
2.5-2.99	.	.	18	167	232	106	550	1346	299	.	2718
3.0-3.49	.	.	5	20	34	44	121	364	92	.	680
3.5-3.99	.	.	.	.	1	13	29	111	63	.	217
4.0-4.49	.	.	.	.	.	.	.	10	11	.	21
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	117	2541	18306	13019	7715	11671	13958	8359	963	5	0

MEAN HS(M) = 1.3 LARGEST HS(M) = 4.1 MEAN TP(SEC) = 10.1 NO. OF CASES = 44814.

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	114	92	499	1331	385	97	18	15	.	.	2551
0.5-0.99	90	501	699	2590	2469	1863	593	107	.	.	8912
1.0-1.49	11	494	525	535	918	1757	1572	268	17	.	6097
1.5-1.99	.	20	207	25	53	284	1052	456	30	.	2127
2.0-2.49	.	.	17	6	1	13	188	328	63	.	615
2.5-2.99	.	.	.	1	.	.	5	54	93	.	127
3.0-3.49	.	.	.	.	.	.	.	6	13	.	24
3.5-3.99	.	.	.	.	.	.	.	.	.	.	1
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	215	1107	1947	4489	3826	4014	3436	1234	186	0	0

MEAN HS(M) = 1.0 LARGEST HS(M) = 3.6 MEAN TP(SEC) = 10.1 NO. OF CASES = 11968.

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	145	.	.	.	.	.	.	.	.	.	145
0.5-0.99	138	1	.	.	.	.	.	.	.	.	139
1.0-1.49	1	5	.	.	.	.	.	.	.	.	6
1.5-1.99	.	.	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	284	6	0	0	0	0	0	0	0	0	0

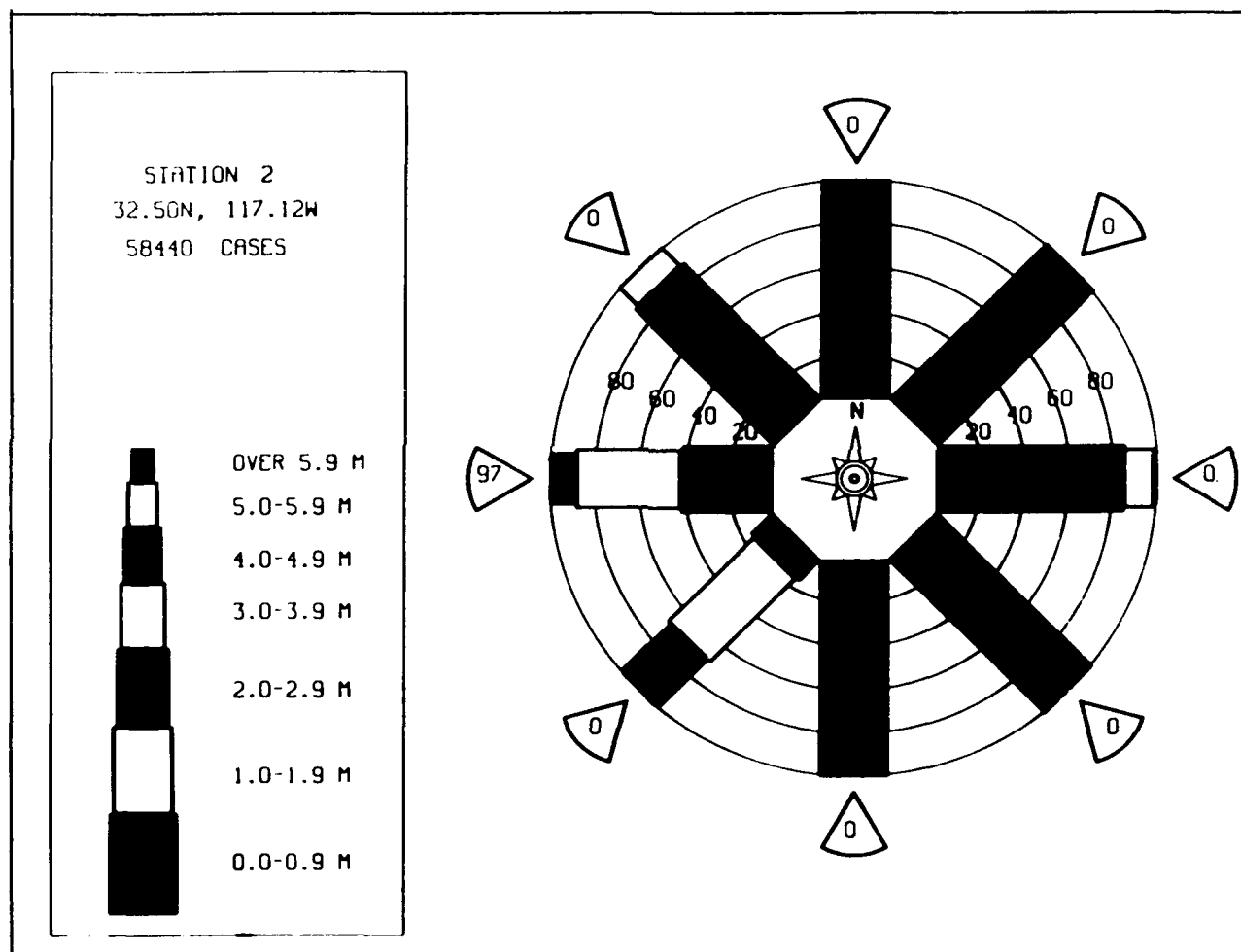
MEAN HS(M) = 0.5 LARGEST HS(M) = 1.1 MEAN TP(SEC) = 3.0 NO. OF CASES = 171.

STATION 2 32.50N 117.12W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	150	.	.	.	.	.	.	.	.	.	150
0.5-0.99	68	.	.	.	.	.	.	.	.	.	68
1.0-1.49	.	.	.	.	.	.	.	.	.	.	0
1.5-1.99	.	.	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	218	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M) = 0.7 MEAN TP(SEC) = 2.8 NO. OF CASES = 128.

STATION 2 32.50N 117.12W FOR ALL DIRECTIONS												TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS												
HEIGHT(METERS)	PERIOD(SECONDS)											
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	138	86	269	342	87	34	6	4				966
1.0-1.9	66	173	804	796	609	559	184	31	1			3223
2.0-2.9	5	102	675	300	333	243	630	121	7			2846
3.0-3.9		5	268	221	175	241	612	306	17			1746
4.0-4.9			26	102	17	13	59	140	34			795
5.0-5.9				2	25	4	12	37	36			298
6.0-6.9					3	1	3	12	10			62
7.0-7.9								1	6			22
8.0-8.9									1			0
9.0-9.9												0
10.0+												0
TOTAL	209	366	2044	1786	1169	1575	1747	958	112	0	0	
MEAN HS(M) = 1.2 LARGEST HS(M) = 4.1 MEAN TP(SEC) = 10.0 TOTAL CASES = 58440.												



MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 2 (32.50N 117.12W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1957	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1958	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1959	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1960	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1961	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1962	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1963	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1964	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1965	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1966	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1967	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1968	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1969	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1970	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1971	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1972	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1973	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1974	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1975	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 2 (32.50N 117.12W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1957	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1958	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1959	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1960	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1961	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1962	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1963	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1964	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1965	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1966	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1967	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1968	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1969	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1970	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1971	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1972	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1973	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1974	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1
1975	1.6	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.7	0.9	1.2	1.6	1.1

20 YR. STATISTICS FOR WIS STATION 2 (32.50N 117.12W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.2
MEAN PEAK WAVE PERIOD (SECONDS) =	10.0
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.6
STANDARD DEVIATION OF TP (SECONDS) =	2.8
LARGEST HS (METERS) =	4.1
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	278.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121406

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0	78	.	.	.	.	.	.	.	.	.	.	.	78
0.1	56	.	.	.	.	.	.	.	.	.	.	.	56
0.2	.	1	.	.	.	.	.	.	.	.	.	.	1
0.3	.	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	.	0
1.1	.	.	.	.	.	.	.	.	.	.	.	.	0
1.2	.	.	.	.	.	.	.	.	.	.	.	.	0
1.3	.	.	.	.	.	.	.	.	.	.	.	.	0
1.4	.	.	.	.	.	.	.	.	.	.	.	.	0
1.5	.	.	.	.	.	.	.	.	.	.	.	.	0
1.6	.	.	.	.	.	.	.	.	.	.	.	.	0
1.7	.	.	.	.	.	.	.	.	.	.	.	.	0
1.8	.	.	.	.	.	.	.	.	.	.	.	.	0
1.9	.	.	.	.	.	.	.	.	.	.	.	.	0
2.0	.	.	.	.	.	.	.	.	.	.	.	.	0
2.1	.	.	.	.	.	.	.	.	.	.	.	.	0
2.2	.	.	.	.	.	.	.	.	.	.	.	.	0
2.3	.	.	.	.	.	.	.	.	.	.	.	.	0
2.4	.	.	.	.	.	.	.	.	.	.	.	.	0
2.5	.	.	.	.	.	.	.	.	.	.	.	.	0
2.6	.	.	.	.	.	.	.	.	.	.	.	.	0
2.7	.	.	.	.	.	.	.	.	.	.	.	.	0
2.8	.	.	.	.	.	.	.	.	.	.	.	.	0
2.9	.	.	.	.	.	.	.	.	.	.	.	.	0
3.0	.	.	.	.	.	.	.	.	.	.	.	.	0
3.1	.	.	.	.	.	.	.	.	.	.	.	.	0
3.2	.	.	.	.	.	.	.	.	.	.	.	.	0
3.3	.	.	.	.	.	.	.	.	.	.	.	.	0
3.4	.	.	.	.	.	.	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	.	.	.	.	.	.	0
3.6	.	.	.	.	.	.	.	.	.	.	.	.	0
3.7	.	.	.	.	.	.	.	.	.	.	.	.	0
3.8	.	.	.	.	.	.	.	.	.	.	.	.	0
3.9	.	.	.	.	.	.	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	.	.	.	.	.	.	0
4.1	.	.	.	.	.	.	.	.	.	.	.	.	0
4.2	.	.	.	.	.	.	.	.	.	.	.	.	0
4.3	.	.	.	.	.	.	.	.	.	.	.	.	0
4.4	.	.	.	.	.	.	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	.	.	0
4.6									

[illegible][illegible][illegible]

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0												6
0.1	0												0
0.2	0												0
0.3	0												0
0.4	0												0
0.5	0												0
0.6	0												0
0.7	0												0
0.8	0												0
0.9	0												0
1.0	0												0
1.1	0												0
1.2	0												0
1.3	0												0
1.4	0												0
1.5	0												0
1.6	0												0
1.7	0												0
1.8	0												0
1.9	0												0
2.0	0												0
2.1	0												0
2.2	0												0
2.3	0												0
2.4	0												0
2.5	0												0
2.6	0												0
2.7	0												0
2.8	0												0
2.9	0												0
3.0	0												0
3.1	0												0
3.2	0												0
3.3	0												0
3.4	0												0
3.5	0												0
3.6	0												0
3.7	0												0
3.8	0												0
3.9	0												0
4.0	0												0
4.1	0												0
4.2	0												0
4.3	0												0
4.4	0												0
4.5	0												

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
800	8	.	.	.	.	.	.	.	.	.	.	.	8	
750	.	.	.	.	.	.	.	.	.	.	.	.
700	.	.	.	.	.	.	.	.	.	.	.	.
650	.	.	.	.	.	.	.	.	.	.	.	.
600	.	.	.	.	.	.	.	.	.	.	.	.
550	.	.	.	.	.	.	.	.	.	.	.	.
500	.	.	.	.	.	.	.	.	.	.	.	.
450	.	.	.	.	.	.	.	.	.	.	.	.
400	.	.	.	.	.	.	.	.	.	.	.	.
350	.	.	.	.	.	.	.	.	.	.	.	.
300	.	.	.	.	.	.	.	.	.	.	.	.
250	.	.	.	.	.	.	.	.	.	.	.	.
200	.	.	.	.	.	.	.	.	.	.	.	.
150	.	.	.	.	.	.	.	.	.	.	.	.
100	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.
0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	8	0	43	15	12	2	10	0	0	0	0	0	57	
MEAN HS(M) = 1.9		LARGEST HS(M) = 3.1		MEAN TP(SEC) = 8.0		NO. OF CASES = 57.								

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	6			5	1	.	.	.	.	.	.	.	1	
0.1	.		.		30	.	.	.	.	.	.	.	2	
0.2	15		15	51	95	25	17	3	.	.	.	.	3	
0.3	10		10	51	51	59	8	8	.	.	.	.	1	
0.4				30	41	37	18	1	.	.	.	.	1	
0.5				15	65	8	11	11	.	.	.	.	0	
0.6				3	27	.	.	.	.	.	.	.	0	
0.7				.	.	.	.	.	.	.	.	.	0	
0.8				.	.	.	.	.	.	.	.	.	0	
0.9				.	.	.	.	.	.	.	.	.	0	
1.0				.	.	.	.	.	.	.	.	.	0	
TOTAL		6	25	158	310	134	64	31	1	0	0	0		
MEAN HS(M) = 1.9		LARGEST HS(M) = 3.4		MEAN TP(SEC) = 8.9		NO. OF CASES = 436.								

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	51	468	1285	828	116	107	13	15		3		2886
0.1	13	763	2531	1493	1493	1872	2412	319	13			12445
0.2	1	306	845	2142	1718	2145	3115	1006	53			13820
0.3		22	2777	2328	797	1872	2412	1006	53			11267
0.4			352	1372	343	767	1668	1466	111			6299
0.5			37	326	337	160	987	1235	138			3220
0.6				65	109	27	246	1897	123			1238
0.7				3	13	8	73	241	51			392
0.8							11	92	5			13
0.9								8				0
TOTAL	65	1559	15693	10537	4926	6187	7183	5030	558	4	0	
MEAN HS(M) = 1.4 LARGEST HS(M) = 4.6 MEAN TP(SEC) = 9.7 NO. OF CASES = 30257.												

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	66	77	710	1748	347	75	11	20				3054
0.1	88	460	1416	5147	3566	2289	643	128				13737
0.2	5	532	1406	1954	2926	5001	3259	419				15520
0.3		35	612	195	403	1894	3795	1262	18			8235
0.4			90	75	10	135	1699	1574	39			3723
0.5			6	17	1	5	224	939	140			1396
0.6			1	3			27	249	152			432
0.7								23	10			36
0.8								3	8			11
0.9												0
TOTAL	159	1104	4241	9140	7258	9400	9658	4617	567	0	0	
MEAN HS(M) = 1.2 LARGEST HS(M) = 4.3 MEAN TP(SEC) = 10.6 NO. OF CASES = 26982.												

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

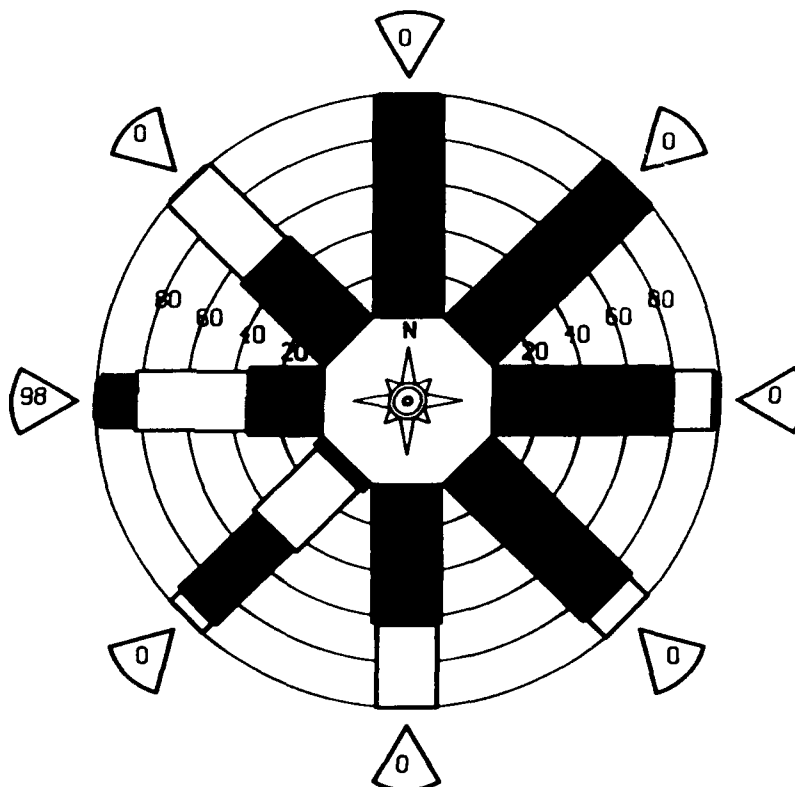
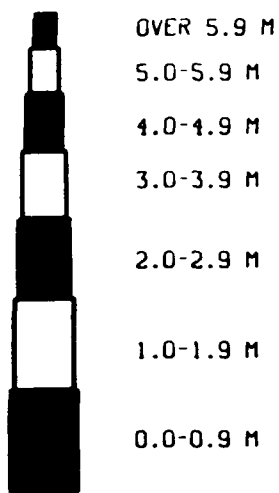
HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	75											75
0.1	69	1										70
0.2	1	585										586
0.3												
0.4												
0.5												
0.6												
0.7												
0.8												
0.9												
TOTAL	144	76	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.7 LARGEST HS(M) = 1.6 MEAN TP(SEC) = 3.7 NO. OF CASES = 130.												

STATION 3 32.50N 117.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	85											85
0.1	53	1										54
0.2												
0.3												
0.4												
0.5												
0.6												
0.7												
0.8												
0.9												
TOTAL	138	4	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.4 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 3.0 NO. OF CASES = 84.												

STATION 3 32.50N 117.32W FOR ALL DIRECTIONS													TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS													
HEIGHT(METERS)	PERIOD(SECONDS)												
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.9	78	54	200	257	46	18	2	3				658	
1.0-1.9	50	134	681	865	505	337	90	17				2660	
2.0-2.9	2	92	730	419	466	376	106	73				1950	
3.0-3.9		8	346	257	126	377	106	226	1			1970	
4.0-4.9			50	149	39	94	106	304	2			1017	
5.0-5.9			5	41	34	17	7	217	3			460	
6.0-6.9			1	9	11	10	2	84	2			171	
7.0-7.9					1	2	7	26	4			40	
8.0-8.9							1	9	5			15	
9.0-9.9												0	
TOTAL	130	278	2013	1997	1228	1561	1685	959	108	0	0	58440	
MEAN HS(M) = 1.3 LARGEST HS(M) = 4.6 MEAN TP(SEC) = 10.0 TOTAL CASES = 58440.													

STATION 3
32.50N, 117.32W
58440 CASES



MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1957	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1958	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1959	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1960	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1961	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1962	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1963	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1964	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1965	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1966	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1967	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1968	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1969	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1970	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1971	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1972	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1973	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1974	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
1975	1.7	1.6	1.5	1.4	1.3	1.3	1.0	0.8	0.6	0.8	1.1	1.1	1.1
MEAN	1.8	1.9	1.7	1.5	1.3	1.2	1.0	0.7	0.8	1.0	1.3	1.8	

MONTH

[illegible]

20 YR. STATISTICS FOR WIS STATION 3 (32.50N 117.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.3
MEAN PEAK WAVE PERIOD (SECONDS) =	10.0
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.7
STANDARD DEVIATION OF TP (SECONDS) =	2.6
LARGEST HS (METERS) =	4.6
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	14.3
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	269.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	57022606

TOTAL

143
6600000000

MEAN HS(M) = 0.4 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.8 NO. OF CASES = 123.

TOTAL

157

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.7 MEAN TP(SEC) = 2.5 NO. OF CASES = 117.

TOTAL

24277000000

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.8 MEAN TP(SEC) = 2.5 NO. OF CASES = 187.

TOTAL

**124
136**

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.8 NO. OF CASES = 154.

[illegible][illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
10.0	1	.	.	.	.	.	.	.	.	.	.	.
9.5	1	.	.	.	.	.	.	.	.	.	.	.
9.0	1	.	.	.	.	.	.	.	.	.	.	.
8.5	1	.	.	.	.	.	.	.	.	.	.	.
8.0	1	.	.	.	.	.	.	.	.	.	.	.
7.5	1	.	.	.	.	.	.	.	.	.	.	.
7.0	1	.	.	.	.	.	.	.	.	.	.	.
6.5	1	.	.	.	.	.	.	.	.	.	.	.
6.0	1	.	.	.	.	.	.	.	.	.	.	.
5.5	1	.	.	.	.	.	.	.	.	.	.	.
5.0	1	.	.	.	.	.	.	.	.	.	.	.
4.5	1	.	.	.	.	.	.	.	.	.	.	.
4.0	1	.	.	.	.	.	.	.	.	.	.	.
3.5	1	.	.	.	.	.	.	.	.	.	.	.
3.0	1	.	.	.	.	.	.	.	.	.	.	.
2.5	1	.	.	.	.	.	.	.	.	.	.	.
2.0	1	.	.	.	.	.	.	.	.	.	.	.
1.5	1	.	.	.	.	.	.	.	.	.	.	.
1.0	1	.	.	.	.	.	.	.	.	.	.	.
0.5	1	.	.	.	.	.	.	.	.	.	.	.
TOTAL		4	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.2		LARGEST HS(M) = 0.5		MEAN TP(SEC) = 2.1		NO. OF CASES = 3.							

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	5	.	.	.	.	.	.	.	.	.	5
0.1	.	.	.	.	.	.	.	.	.	.	.
0.2	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	5	0	0	0	0	0	0	0	0	0	5
MEAN HS(M) =	0.1	LARGEST HS(M) =	0.1	MEAN TP(SEC) =	1.3	NO. OF CASES =	3.				

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	10	.	.	.	.	.	.	.	.	.	10
0.1	.	.	.	.	.	.	.	.	.	.	.
0.2	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	10	0	7	8	0	0	0	0	0	0	16
MEAN HS(M) =	1.1	LARGEST HS(M) =	2.1	MEAN TP(SEC) =	5.6	NO. OF CASES =	16.				

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	6	.	.	.	.	.	.	.	.	.	6
0.1	.	.	.	.	.	.	.	.	.	.	.
0.2	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	6	0	39	25	23	0	13	0	0	0	67
MEAN HS(M) =	1.9	LARGEST HS(M) =	3.1	MEAN TP(SEC) =	8.5	NO. OF CASES =	67.				

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	30	.	.	.	.	.	.	.	.	.	30
0.1	.	.	.	.	.	.	.	.	.	.	.
0.2	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	30	35	240	490	206	103	90	16	1	0	719
MEAN HS(M) =	1.8	LARGEST HS(M) =	4.0	MEAN TP(SEC) =	9.0	NO. OF CASES =	719.				

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	82	658	1971	1748	323	203	25	11	3	.	.	5024
0.50-0.99	34	942	6582	4553	2595	2351	735	131	1	.	.	17941
1.00-1.49	.	383	6599	2193	1949	3648	3018	773	1	.	.	16595
1.50-1.99	.	.	2525	2498	725	1853	3767	2168	1	.	.	13689
2.00-2.49	.	.	299	1267	396	561	2039	2200	1	.	.	9955
2.50-2.99	.	.	5	56	77	80	670	1125	1	.	.	2832
3.00-3.49	.	.	.	.	6	35	215	314	44	.	.	776
3.50-3.99	.	.	.	.	.	1	70	148	.	.	.	303
4.00-4.49	.	.	.	.	.	.	.	41	.	.	.	47
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	116	2008	18008	12588	6445	8940	10544	6911	602	0	0	

MEAN HS(M) = 1.3 LARGEST HS(M) = 4.3 MEAN TP(SEC) = 9.9 NO. OF CASES = 38685.

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	92	65	482	1485	479	123	30	20	.	.	.	2776
0.50-0.99	79	523	900	3342	3182	2657	959	158	.	.	.	11740
1.00-1.49	8	604	1192	999	1592	3020	2737	383	18	.	.	10555
1.50-1.99	.	44	586	97	1240	686	2036	665	32	.	.	4270
2.00-2.49	.	.	5	73	29	410	347	61	61	.	.	1001
2.50-2.99	.	.	.	17	1	42	66	34	.	.	.	167
3.00-3.49	.	.	.	1	.	11	1	.	.	.	.	17
3.50-3.99	.	.	.	.	.	.	.	.	.	.	.	3
4.00-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	175	1236	3243	6018	5393	6477	6222	1620	145	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M) = 3.9 MEAN TP(SEC) = 10.2 NO. OF CASES = 17856.

STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	128	25	.	.	.	.	.	.	.	.	.	128
0.50-0.99	152	87	.	.	.	.	.	.	.	.	.	177
1.00-1.49	3	1	3	.	.	.	.	.	.	.	.	4
1.50-1.99	.	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	283	113	4	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M) = 1.9 MEAN TP(SEC) = 3.6 NO. OF CASES = 236.

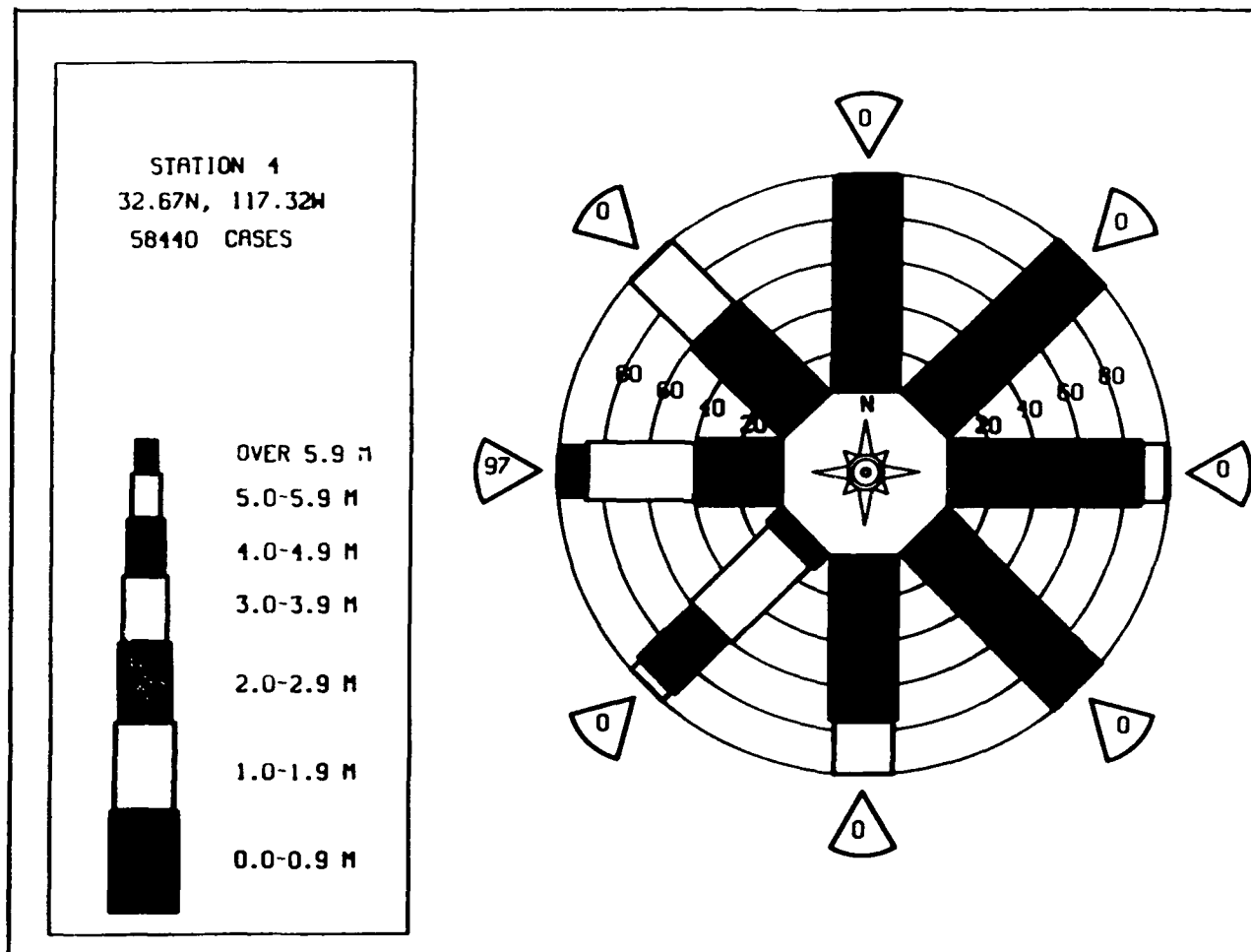
STATION 4 32.67N 117.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	126	.	.	.	.	.	.	.	.	.	.	126
0.50-0.99	109	3	.	.	.	.	.	.	.	.	.	109
1.00-1.49	.	.	.	.	.	.	.	.	.	.	.	0
1.50-1.99	.	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	235	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 3.1 NO. OF CASES = 140.

STATION 4 32.67N 117.32W FOR ALL DIRECTIONS													TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS													
HEIGHT(METERS)	PERIOD(SECONDS)												
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.49	123	72	246	323	80	32	5	3	1	.	.	884	
0.50-0.99	80	149	250	795	578	467	169	27	5	.	.	3046	
1.0-1.49	4	110	788	332	671	671	277	115	16	.	.	1096	
1.50-1.99	.	7	321	274	358	256	284	233	125	.	.	1834	
2.0-2.49	.	.	43	140	93	60	245	255	165	.	.	512	
2.50-2.99	.	.	.	37	46	21	73	119	18	.	.	82	
3.0-3.49	.	.	.	9	40	8	23	31	2	.	.	29	
3.50-3.99	.	.	.	.	9	3	1	4	4	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	207	338	2152	1910	1204	1548	1684	852	71	0	0		
MEAN HS(M) = 1.2 LARGEST HS(M) = 4.3 MEAN TP(SEC) = 9.8 TOTAL CASES = 58440.													

MEAN HS(M) = 1.2 LARGEST HS(M) = 4.3 MEAN TP(SEC) = 9.8 TOTAL CASES = 58440.



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 4 (32.67N 117.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1957	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1958	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1959	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1960	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1961	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1962	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1963	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1964	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1965	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1966	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1967	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1968	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1969	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1970	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1971	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1972	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1973	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1974	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
1975	1.1	1.6	1.4	1.2	1.1	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.1
MEAN	1.6	1.7	1.5	1.4	1.2	1.2	0.9	0.7	0.7	0.9	1.2	1.6	

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 4 (32.67N 117.32W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1957	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1958	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1959	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1960	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1961	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1962	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1963	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1964	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1965	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1966	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1967	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1968	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1969	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1970	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1971	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1972	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1973	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1974	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1975	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

20 YR. STATISTICS FOR WIS STATION 4 (32.67N 117.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 1.2
 MEAN PEAK WAVE PERIOD (SECONDS) = 9.8
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.6
 STANDARD DEVIATION OF TP (SECONDS) = 2.7
 LARGEST HS (METERS) = 4.3
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 14.3
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 267.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 57022603

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.4	874	.	.	.	.	.	.	.	.	.	874
0.5-0.9	501	.	.	.	.	.	.	.	.	.	501
1.0-1.4
1.5-1.9
2.0-2.4
2.5-2.9
3.0-3.4
3.5-3.9
4.0-4.4
4.5-4.9
5.0-5.4
5.5-5.9
6.0-6.4
6.5-6.9
7.0-7.4
7.5-7.9
8.0-8.4
8.5-8.9
9.0-9.4
9.5-9.9
TOTAL	1376	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.8 NO. OF CASES = 805.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.4	735	.	.	.	.	.	.	.	.	.	735
0.5-0.9	205	.	.	.	.	.	.	.	.	.	205
1.0-1.4	1	.	.	.	.	.	.	.	.	.	1
1.5-1.9
2.0-2.4
2.5-2.9
3.0-3.4
3.5-3.9
4.0-4.4
4.5-4.9
5.0-5.4
5.5-5.9
6.0-6.4
6.5-6.9
7.0-7.4
7.5-7.9
8.0-8.4
8.5-8.9
9.0-9.4
9.5-9.9
TOTAL	941	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.3 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.6 NO. OF CASES = 551.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.4	985	.	.	.	.	.	.	.	.	.	985
0.5-0.9	200	.	.	.	.	.	.	.	.	.	200
1.0-1.4
1.5-1.9
2.0-2.4
2.5-2.9
3.0-3.4
3.5-3.9
4.0-4.4
4.5-4.9
5.0-5.4
5.5-5.9
6.0-6.4
6.5-6.9
7.0-7.4
7.5-7.9
8.0-8.4
8.5-8.9
9.0-9.4
9.5-9.9
TOTAL	1185	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.4 NO. OF CASES = 693.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.4	578	.	.	.	.	.	.	.	.	.	578
0.5-0.9	403	.	.	.	.	.	.	.	.	.	403
1.0-1.4	18	.	.	.	.	.	.	.	.	.	18
1.5-1.9
2.0-2.4
2.5-2.9
3.0-3.4
3.5-3.9
4.0-4.4
4.5-4.9
5.0-5.4
5.5-5.9
6.0-6.4
6.5-6.9
7.0-7.4
7.5-7.9
8.0-8.4
8.5-8.9
9.0-9.4
9.5-9.9
TOTAL	999	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.7 NO. OF CASES = 585.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	381	381
0.5	506	506
1.0	107	107
1.5	13	13
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
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78.0	.	.	.</									

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	147			112	27		3	1					29
0.1	10		118	116	162	140	153	63					75
0.2			630	429	294	106	124	246	22				931
0.3				213	398	20	135	255	102				1310
0.4				44	154	88	155	1	25				320
0.5					70	20	13		6				116
0.6													13
0.7													0
0.8													0
0.9													0
TOTAL		157	194	1114	1105	259	171	192	63	0	0	0	0
MEAN HS(M) = 1.3		LARGEST HS(M) = 3.1		MEAN TP(SEC) = 8.3		NO. OF CASES = 1913.							

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	367	258	1596	744	352	273	157	68	8	.	.	3823
0.5-0.99	83	361	3655	1146	768	1113	1096	492	20	.	.	8734
1.0-1.49	8	311	2494	1365	335	693	963	578	18	.	.	6765
1.5-1.99	.	39	660	864	152	124	549	446	27	.	.	2861
2.0-2.49	.	1	85	285	68	32	70	143	20	.	.	704
2.5-2.99	.	.	10	29	32	8	10	56	1	.	.	146
3.0-3.49	1	.	.	.	.	.	.	2
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	458	970	8501	4433	1708	2243	2845	1783	94	0	0	

MEAN HS(M) = 1.0 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 9.1 NO. OF CASES = 13477.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	535	171	1052	4028	2390	1895	710	160	17	.	.	10958
0.5-0.99	598	882	1625	4847	5229	8062	6666	1960	106	.	.	29975
1.0-1.49	44	1817	1647	989	1488	2787	5359	3276	301	.	.	17708
1.5-1.99	.	200	811	195	82	316	997	1178	167	.	.	3946
2.0-2.49	.	.	121	78	30	10	112	177	77	.	.	605
2.5-2.99	.	.	22	6	1	.	17	11	.	.	.	57
3.0-3.49	.	.	.	3	.	.	.	.	.	.	.	3
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	1177	3070	5278	10146	9220	13070	13861	6762	668	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.4 MEAN TP(SEC) = 10.5 NO. OF CASES = 36979.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	942	.	.	.	.	.	.	.	.	.	.	942
0.5-0.99	1078	112	.	.	.	.	.	.	.	.	.	1190
1.0-1.49	42	492	.	.	.	3	.	.	.	.	.	543
1.5-1.99	.	13	.	.	.	.	.	.	.	.	.	3
2.0-2.49	.	.	20	.	.	.	.	.	.	.	.	20
2.5-2.99	.	.	3	.	.	.	.	.	.	.	.	3
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	2062	619	33	0	0	3	0	0	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 3.6 NO. OF CASES = 1591.

STATION 5 32.83N 117.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	751	.	.	.	.	.	.	.	.	.	.	751
0.5-0.99	643	10	.	.	.	.	.	.	.	.	.	653
1.0-1.49	1	.	.	.	.	.	.	.	.	.	.	1
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	1395	18	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.1 MEAN TP(SEC) = 3.1 NO. OF CASES = 827.

STATION 5 32.83N 117.32W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

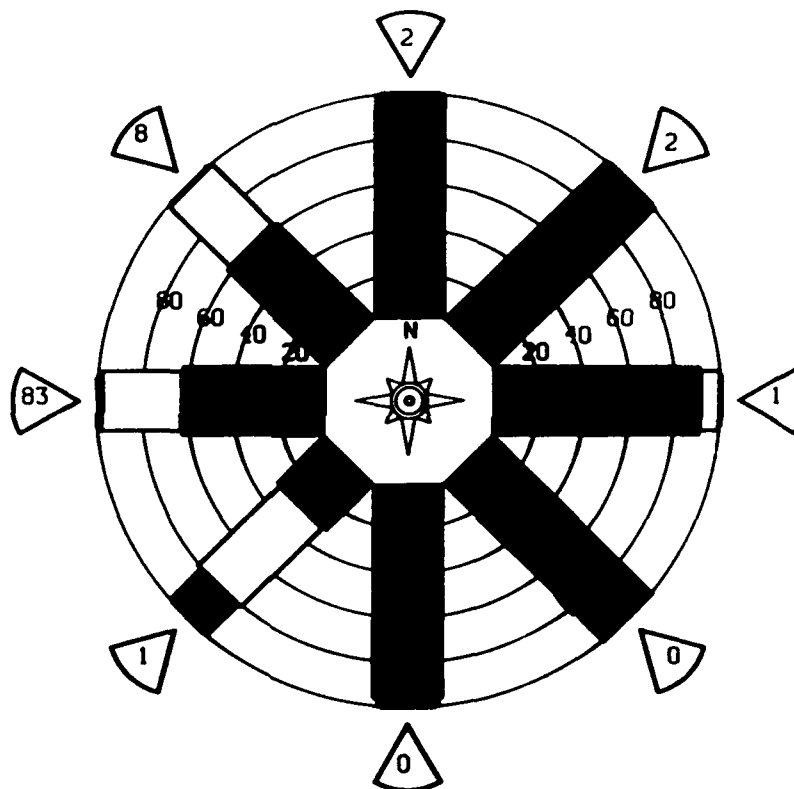
HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	671	43	276	479	274	217	86	22	2	.	.	2070
0.5-0.99	426	148	559	615	601	923	782	247	12	.	.	4313
1.0-1.49	23	269	462	267	187	351	639	386	31	.	.	2615
1.5-1.99	1	26	176	150	34	47	158	165	19	.	.	776
2.0-2.49	.	.	26	33	18	5	20	32	9	.	.	163
2.5-2.99	.	.	3	12	5	1	4	6	.	.	.	33
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	1
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1121	486	1502	1576	1119	1547	1689	858	73	0	0	58440

MEAN HS(M) = 0.9 LARGEST HS(M) = 3.4 MEAN TP(SEC) = 9.3 TOTAL CASES = 58440.

STATION 5
 32.83N, 117.32W
 58440 CASES



OVER 5.9 M
 5.0-5.9 M
 4.0-4.9 M
 3.0-3.9 M
 2.0-2.9 M
 1.0-1.9 M
 0.0-0.9 M



WIS STATION 5 (32.83N 117.32W)

YEAR
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
MEAN

WIS STATION 5 (32.83N 117.32W)

YEAR

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.9
MEAN PEAK WAVE PERIOD (SECONDS) =	9.3
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	292.5
STANDARD DEVIATION OF HS (METERS) =	0.5
STANDARD DEVIATION OF TP (SECONDS) =	3.4
LARGEST HS (METERS) =	3.4
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	8.3
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	293.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	74041000

TOTAL

[illegible]

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 2.9 NO. OF CASES = 1479.

TOTAL[illegible]

MEAN HS(M) = 0.3 LARGEST HS(M) = 1.2 MEAN TP(SEC) = 2.1 NO. OF CASES = 224.

TOTAL[illegible]

MEAN HS(M) = 0.2 LARGEST HS(M) = 0.8 MEAN TP(SEC) = 1.6 NO. OF CASES = 104.

TOTAL[illegible]

MEAN HS(M) = 0.1 LARGEST HS(M) = 0.3 MEAN TP(SEC) = 1.4 NO. OF CASES = 78.

TOTAL[illegible][illegible]

15400000000000

MEAN HS(M) = 0.1 LARGEST HS(M) = 0.4 MEAN TP(SEC) = 1.4 NO. OF CASES = 90.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
118
6	.	13	13
.	.	8	15	1
.	.	1
.
.
124	0	23	28	1	0	0	0	0	0	0

118
26
23
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MEAN HS(M) = 0.6 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 3.8 NO. OF CASES = 106.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
205	29	85	153	10	1	.	.	.	.	.
13	13	148	100	42	3	.	.	.	.	.
.	1	128	90	22	.	.	.	.	.	.
.	.	22	68	10	5	1	.	.	.	.
.	.	.	22	1	1	15	.	.	.	.
.
.
218	43	384	318	85	10	16	0	0	0	0

0470-10600000
0470-10600000
0470-10600000
0470-10600000

MEAN HS(M) = 1.2 LARGEST HS(M) = 2.9 MEAN TP(SEC) = 6.9 NO. OF CASES = 636.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-24.9	25.0-29.9	30.0-34.9	35.0-39.9	40.0-44.9	45.0-49.9	50.0-54.9	55.0-59.9	60.0-64.9	65.0-69.9	70.0-74.9	75.0-79.9	80.0-84.9	85.0-89.9	90.0-94.9	95.0-99.9	100.0-104.9	105.0-109.9	110.0-114.9	115.0-119.9	120.0-124.9	125.0-129.9	130.0-134.9	135.0-139.9	140.0-144.9	145.0-149.9	150.0-154.9	155.0-159.9	160.0-164.9	165.0-169.9	170.0-174.9	175.0-179.9	180.0-184.9	185.0-189.9	190.0-194.9	195.0-199.9	200.0-204.9	205.0-209.9	210.0-214.9	215.0-219.9	220.0-224.9	225.0-229.9	230.0-234.9	235.0-239.9	240.0-244.9	245.0-249.9	250.0-254.9	255.0-259.9	260.0-264.9	265.0-269.9	270.0-274.9	275.0-279.9	280.0-284.9	285.0-289.9	290.0-294.9	295.0-299.9	300.0-304.9	305.0-309.9	310.0-314.9	315.0-319.9	320.0-324.9	325.0-329.9	330.0-334.9	335.0-339.9	340.0-344.9	345.0-349.9	350.0-354.9	355.0-359.9	360.0-364.9	365.0-369.9	370.0-374.9	375.0-379.9	380.0-384.9	385.0-389.9	390.0-394.9	395.0-399.9	400.0-404.9	405.0-409.9	410.0-414.9	415.0-419.9	420.0-424.9	425.0-429.9	430.0-434.9	435.0-439.9	440.0-444.9	445.0-449.9	450.0-454.9	455.0-459.9	460.0-464.9	465.0-469.9	470.0-474.9	475.0-479.9	480.0-484.9	485.0-489.9	490.0-494.9	495.0-499.9	500.0-504.9	505.0-509.9	510.0-514.9	515.0-519.9	520.0-524.9	525.0-529.9	530.0-534.9	535.0-539.9	540.0-544.9	545.0-549.9	550.0-554.9	555.0-559.9	560.0-564.9	565.0-569.9	570.0-574.9	575.0-579.9	580.0-584.9	585.0-589.9	590.0-594.9	595.0-599.9	600.0-604.9	605.0-609.9	610.0-614.9	615.0-619.9	620.0-624.9	625.0-629.9	630.0-634.9	635.0-639.9	640.0-644.9	645.0-649.9	650.0-654.9	655.0-659.9	660.0-664.9	665.0-669.9	670.0-674.9	675.0-679.9	680.0-684.9	685.0-689.9	690.0-694.9	695.0-699.9	700.0-704.9	705.0-709.9	710.0-714.9	715.0-719.9	720.0-724.9	725.0-729.9	730.0-734.9	735.0-739.9	740.0-744.9	745.0-749.9	750.0-754.9	755.0-759.9	760.0-764.9	765.0-769.9	770.0-774.9	775.0-779.9	780.0-784.9	785.0-789.9	790.0-794.9	795.0-799.9	800.0-804.9	805.0-809.9	810.0-814.9	815.0-819.9	820.0-824.9	825.0-829.9	830.0-834.9	835.0-839.9	840.0-844.9	845.0-849.9	850.0-854.9	855.0-859.9	860.0-864.9	865.0-869.9	870.0-874.9	875.0-879.9	880.0-884.9	885.0-889.9	890.0-894.9	895.0-899.9	900.0-904.9	905.0-909.9	910.0-914.9	915.0-919.9	920.0-924.9	925.0-929.9	930.0-934.9	935.0-939.9	940.0-944.9	945.0-949.9	950.0-954.9	955.0-959.9	960.0-964.9	965.0-969.9	970.0-974.9	975.0-979.9	980.0-984.9	985.0-989.9	990.0-994.9	995.0-999.9	1000.0-1004.9	1005.0-1009.9	1010.0-1014.9	1015.0-1019.9	1020.0-1024.9	1025.0-1029.9	1030.0-1034.9	1035.0-1039.9	1040.0-1044.9	1045.0-1049.9	1050.0-1054.9	1055.0-1059.9	1060.0-1064.9	1065.0-1069.9	1070.0-1074.9	1075.0-1079.9	1080.0-1084.9	1085.0-1089.9	1090.0-1094.9	1095.0-1099.9	1100.0-1104.9	1105.0-1109.9	1110.0-1114.9	1115.0-1119.9	1120.0-1124.9	1125.0-1129.9	1130.0-1134.9	1135.0-1139.9	1140.0-1144.9	1145.0-1149.9	1150.0-1154.9	1155.0-1159.9	1160.0-1164.9	1165.0-1169.9
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22784
20836
32896

MEAN HS(M) = 1.0 LARGEST HS(M) = 2.7 MEAN TP(SEC) = 8.4 NO. OF CASES = 4186.

STATION 6 33.00N 117.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	650	316	2838	1894	1714	2737	2936	852	41	.	.	13978
0.5-0.99	242	667	6261	2474	2152	4715	7612	3622	268	.	.	28013
1.0-1.49	29	900	2809	1817	275	590	1575	1167	97	.	.	9259
1.5-1.99	.	174	523	636	150	35	116	159	29	.	.	1827
2.0-2.49	.	8	99	87	30	8	5	1	.	.	.	238
2.5-2.99	.	.	8	.	.	5	.	.	.	.	.	13
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.99	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	921	2065	12543	6908	4321	8090	12244	5801	435	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.8 MEAN TP(SEC) = 10.1 NO. OF CASES = 31177.

STATION 6 33.00N 117.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	1047	56	306	1788	1485	882	97	.	.	.	.	5661
0.5-0.99	1086	742	638	1635	1721	1386	241	.	.	.	.	7449
1.0-1.49	111	2665	462	184	314	395	148	11	.	.	.	4290
1.5-1.99	.	280	383	18	5	3	35	5	.	.	.	729
2.0-2.49	.	3	90	.	.	.	1	.	.	.	.	94
2.5-2.99	.	.	8	.	.	.	.	.	.	.	.	8
3.0-3.49	.	.	1	.	.	.	.	.	.	.	.	1
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.99	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2244	3746	1888	3625	3525	2666	521	17	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M) = 3.2 MEAN TP(SEC) = 7.9 NO. OF CASES = 10665.

STATION 6 33.00N 117.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	1822	.	.	.	.	.	.	.	.	.	.	1822
0.5-0.99	2151	66	.	.	.	.	.	.	.	.	.	2415
1.0-1.49	123	482	.	.	.	.	.	.	.	.	.	605
1.5-1.99	.	11	1	.	.	.	.	.	.	.	.	1
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.99	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4296	559	1	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M) = 1.7 MEAN TP(SEC) = 3.4 NO. OF CASES = 2840.

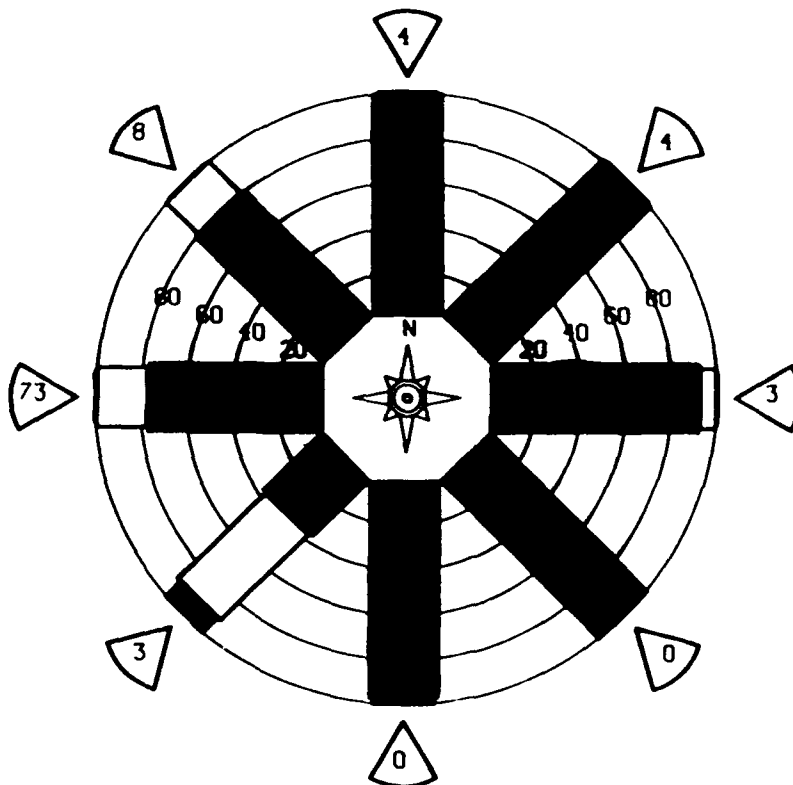
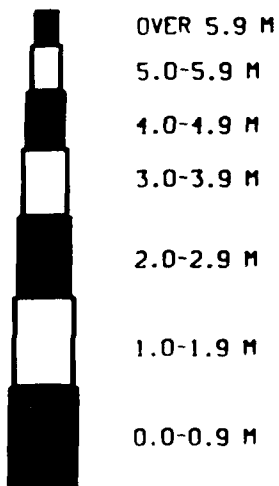
STATION 6 33.00N 117.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	1420	.	.	.	.	.	.	.	.	.	.	1420
0.5-0.99	1372	.	.	.	.	.	.	.	.	.	.	1372
1.0-1.49	27	1	.	.	.	.	.	.	.	.	.	28
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.99	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2819	1	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.2 MEAN TP(SEC) = 3.0 NO. OF CASES = 1649.

STATION 6 33.00N 117.32W FOR ALL DIRECTIONS													TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS													
HEIGHT(METERS)	PERIOD(SECONDS)												
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.9	1368	43	337	375	321	367	309	86	4	.	.	3210	
1.0-1.9	894	173	828	451	393	632	818	379	26	.	.	4594	
2.0-2.9	57	47	458	281	72	103	169	140	10	.	.	1727	
3.0-3.9	.	1	24	118	27	6	15	21	2	.	.	371	
4.0-4.9	.	.	1	3	.	2	.	.	.	.	.	67
5.0-5.9	.	.	.	.	.	.	.	.	.	.	.	0
6.0+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2321	681	1781	1253	826	1114	1332	626	42	0	0	0	
MEAN HS(M) = 0.7 LARGEST HS(M) = 3.2 MEAN TP(SEC) = 8.1 TOTAL CASES = 58440.													

STATION 6
33.00N, 117.32W
58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 6 (33.00N 117.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	0.7	0.7	0.8	0.8	0.8	0.6	0.6	0.4	0.4	0.6	0.6	0.6
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.5	0.5	0.5	0.6	0.8	

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 6 (33.00N 117.32W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	

20 YR. STATISTICS FOR WIS STATION 6 (33.00N 117.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 0.7
 MEAN PEAK WAVE PERIOD (SECONDS) = 8.1
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.4
 STANDARD DEVIATION OF TP (SECONDS) = 3.8
 LARGEST HS (METERS) = 3.2
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 7.1
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 288.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 74041000

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	3												3
0.1	9												9
0.2	1												1
0.3	1												1
0.4	1												1
0.5	1												1
0.6	1												1
0.7	1												1
0.8	1												1
0.9	1												1
1.0	1												1
1.1	1												1
1.2	1												1
1.3	1												1
1.4	1												1
1.5	1												1
1.6	1												1
1.7	1												1
1.8	1												1
1.9	1												1
2.0	1												1
2.1	1												1
2.2	1												1
2.3	1												1
2.4	1												1
2.5	1												1
2.6	1												1
2.7	1												1
2.8	1												1
2.9	1												1
3.0	1												1
3.1	1												1
3.2	1												1
3.3	1												1
3.4	1												1
3.5	1												1
3.6	1												1
3.7	1												1
3.8	1												1
3.9	1												1
4.0	1												1
4.1	1												1
4.2	1												1
4.3	1												1
4.4	1												1
4.5	1												

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
65	.....	.	.	.	.	.	.	.	.	.	.	.	65
60	.....	.	.	.	.	.	.	.	.	.	.	.
55	.....	.	.	.	.	.	.	.	.	.	.	.
50	.....	.	.	.	.	.	.	.	.	.	.	.
45	.....	.	.	.	.	.	.	.	.	.	.	.
40	.....	.	.	.	.	.	.	.	.	.	.	.
35	.....	.	.	.	.	.	.	.	.	.	.	.
30	.....	.	.	.	.	.	.	.	.	.	.	.
25	.....	.	.	.	.	.	.	.	.	.	.	.
20	.....	.	.	.	.	.	.	.	.	.	.	.
15	.....	.	.	.	.	.	.	.	.	.	.	.
10	.....	.	.	.	.	.	.	.	.	.	.	.
5	.....	.	.	.	.	.	.	.	.	.	.	.
TOTAL	65	0	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.1		LARGEST HS(M) = 0.3		MEAN TP(SEC) = 1.7		NO. OF CASES = 38.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	49
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
4.1
4.2
4.3
4.4
4.5
4.6
4.7	.	.	.										

[illegible][illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
100	102		41	56	18	6	5	1	5				234	
95	5		128	509	177	63	17	77					236	
90			70	511	424	142	13	133					238	
85			3	208	258	219	95	222	27				240	
80				10	63	66	30	68	100				242	
75				1	11	1	22	58	58				244	
70									1				246	
65									18				248	
60													250	
55													252	
50													254	
45													256	
40													258	
35													260	
30													262	
25													264	
20													266	
15													268	
10													270	
5													272	
TOTAL		107	242	1295	951	497	459	559	535	94	1	0	2783	
MEAN HS(M) = 1.3		LARGEST HS(M) = 3.0		MEAN TP(SEC) = 9.6		NO. OF CASES = 2783.								

STATION 7 33.17N 117.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	248	1456	5272	4380	2327	1829	744	186	17	6	.	16445
0.1	63	1538	1342	5213	4034	6201	6582	2532	102	.	.	39685
0.2	20	860	5467	3312	884	1683	3983	5118	636	3	.	21966
0.3	.	131	636	1288	470	254	660	2022	850	.	.	6311
0.4	.	.	34	136	162	73	145	287	248	.	.	1088
0.5	.	.	.	1	5	22	17	18	77	.	.	143
0.6	.	.	.	.	.	.	.	.	.	.	.	1
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	331	3988	24832	14331	7882	10062	12131	10163	1930	9	0	0

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.1 MEAN TP(SEC) = 9.8 NO. OF CASES = 50074.

STATION 7 33.17N 117.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	374	224	1005	1	.	.	.	.	.	.	.	374
0.1	361	209	1005	5	1	.	.	.	.	.	.	390
0.2	27	35	1	.	.	.	.	.	.	.	.	327
0.3	.	.	.	.	.	.	.	.	.	.	.	48
0.4	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	762	348	24	6	1	0	0	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.4 MEAN TP(SEC) = 3.7 NO. OF CASES = 671.

STATION 7 33.17N 117.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	648	1	.	.	.	.	.	.	.	.	.	648
0.1	903	25	.	.	.	.	.	.	.	.	.	904
0.2	30	.	.	.	.	.	.	.	.	.	.	55
0.3	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1581	26	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.4 MEAN TP(SEC) = 3.1 NO. OF CASES = 941.

STATION 7 33.17N 117.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	692	.	.	.	.	.	.	.	.	.	.	692
0.1	361	.	.	.	.	.	.	.	.	.	.	361
0.2	.	.	.	.	.	.	.	.	.	.	.	0
0.3	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1043	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M) = 0.7 MEAN TP(SEC) = 2.7 NO. OF CASES = 610.

STATION 7 33.17N 117.32W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.9	580	149	532	440	233	183	74	19	1	.	.	.	2211
1.0-1.9	298	169	139	541	409	163	66	26	10	.	.	.	4379
2.0-2.9	24	125	603	158	106	107	41	25	64	.	.	.	2423
3.0-3.9	.	17	903	150	75	152	88	22	38	.	.	.	751
4.0-4.9	.	.	5	23	1	11	21	4	9	.	.	.	157
5.0-5.9	.	.	.	.	.	.	.	.	.	.	.	.	30
6.0-6.9	.	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.9	.	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.9	.	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.9	.	.	.	.	.	.	.	.	.	.	.	.	0
10.0-10.9	.	.	.	.	.	.	.	.	.	.	.	.	0
11.0-11.9	.	.	.	.	.	.	.	.	.	.	.	.	0
12.0-12.9	.	.	.	.	.	.	.	.	.	.	.	.	0
13.0-13.9	.	.	.	.	.	.	.	.	.	.	.	.	0
14.0-14.9	.	.	.	.	.	.	.	.	.	.	.	.	0
15.0-15.9	.	.	.	.	.	.	.	.	.	.	.	.	0
16.0-16.9	.	.	.	.	.	.	.	.	.	.	.	.	0
17.0-17.9	.	.	.	.	.	.	.	.	.	.	.	.	0
18.0-18.9	.	.	.	.	.	.	.	.	.	.	.	.	0
19.0-19.9	.	.	.	.	.	.	.	.	.	.	.	.	0
20.0-20.9	.	.	.	.	.	.	.	.	.	.	.	.	0
21.0-21.9	.	.	.	.	.	.	.	.	.	.	.	.	0
22.0-22.9	.	.	.	.	.	.	.	.	.	.	.	.	0
23.0-23.9	.	.	.	.	.	.	.	.	.	.	.	.	0
24.0-24.9	.	.	.	.	.	.	.	.	.	.	.	.	0
25.0-25.9	.	.	.	.	.	.	.	.	.	.	.	.	0
26.0-26.9	.	.	.	.	.	.	.	.	.	.	.	.	0
27.0-27.9	.	.	.	.	.	.	.	.	.	.	.	.	0
28.0-28.9	.	.	.	.	.	.	.	.	.	.	.	.	0
29.0-29.9	.	.	.	.	.	.	.	.	.	.	.	.	0
30.0-30.9	.	.	.	.	.	.	.	.	.	.	.	.	0
31.0-31.9	.	.	.	.	.	.	.	.	.	.	.	.	0
32.0-32.9	.	.	.	.	.	.	.	.	.	.	.	.	0
33.0-33.9	.	.	.	.	.	.	.	.	.	.	.	.	0
34.0-34.9	.	.	.	.	.	.	.	.	.	.	.	.	0
35.0-35.9	.	.	.	.	.	.	.	.	.	.	.	.	0
36.0-36.9	.	.	.	.	.	.	.	.	.	.	.	.	0
37.0-37.9	.	.	.	.	.	.	.	.	.	.	.	.	0
38.0-38.9	.	.	.	.	.	.	.	.	.	.	.	.	0
39.0-39.9	.	.	.	.	.	.	.	.	.	.	.	.	0
40.0-40.9	.	.	.	.	.	.	.	.	.	.	.	.	0
41.0-41.9	.	.	.	.	.	.	.	.	.	.	.	.	0
42.0-42.9	.	.	.	.	.	.	.	.	.	.	.	.	0
43.0-43.9	.	.	.	.	.	.	.	.	.	.	.	.	0
44.0-44.9	.	.	.	.	.	.	.	.	.	.	.	.	0
45.0-45.9	.	.	.	.	.	.	.	.	.	.	.	.	0
46.0-46.9	.	.	.	.	.	.	.	.	.	.	.	.	0
47.0-47.9	.	.	.	.	.	.	.	.	.	.	.	.	0
48.0-48.9	.	.	.	.	.	.	.	.	.	.	.	.	0
49.0-49.9	.	.	.	.	.	.	.	.	.	.	.	.	0
50.0-50.9	.	.	.	.	.	.	.	.	.	.	.	.	0
51.0-51.9	.	.	.	.	.	.	.	.	.	.	.	.	0
52.0-52.9	.	.	.	.	.	.	.	.	.	.	.	.	0
53.0-53.9	.	.	.	.	.	.	.	.	.	.	.	.	0
54.0-54.9	.	.	.	.	.	.	.	.	.	.	.	.	0
55.0-55.9	.	.	.	.	.	.	.	.	.	.	.	.	0
56.0-56.9	.	.	.	.	.	.	.	.	.	.	.	.	0
57.0-57.9	.	.	.	.	.	.	.	.	.	.	.	.	0
58.0-58.9	.	.	.	.	.	.	.	.	.	.	.	.	0
59.0-59.9	.	.	.	.	.	.	.	.	.	.	.	.	0
60.0-60.9	.	.	.	.	.	.	.	.	.	.	.	.	0
61.0-61.9	.	.	.	.	.	.	.	.	.	.	.	.	0
62.0-62.9	.	.	.	.	.	.	.	.	.	.	.	.	0
63.0-63.9	.	.	.	.	.	.	.	.	.	.	.	.	0
64.0-64.9	.	.	.	.	.	.	.	.	.	.	.	.	0
65.0-65.9	.	.	.	.	.	.	.	.	.	.	.	.	0
66.0-66.9	.	.	.	.	.	.	.	.	.	.	.	.	0
67.0-67.9	.	.	.	.	.	.	.	.	.	.	.	.	0
68.0-68.9	.	.	.	.	.	.	.	.	.	.	.	.	0
69.0-69.9	.	.	.	.	.	.	.	.	.	.	.	.	0
70.0-70.9	.	.	.	.	.	.	.	.	.	.	.	.	0
71.0-71.9	.	.	.	.	.	.	.	.	.	.	.	.	0
72.0-72.9	.	.	.	.	.	.	.	.	.	.	.	.	0
73.0-73.9	.	.	.	.	.	.	.	.	.	.	.	.	0
74.0-74.9	.	.	.	.	.	.	.	.	.	.	.	.	0
75.0-75.9	.	.	.	.	.	.	.	.	.	.	.	.	0
76.0-76.9	.	.	.	.	.	.	.	.	.	.	.	.	0
77.0-77.9	.	.	.	.	.	.	.	.	.	.	.	.	0
78.0-78.9	.	.	.	.	.	.	.	.	.	.	.	.	0
79.0-79.9	.	.	.	.	.	.	.	.	.	.	.	.	0
80.0-80.9	.	.	.	.	.	.	.	.	.	.	.	.	0
81.0-81.9	.	.	.	.	.	.	.	.	.	.	.	.	0
82.0-82.9	.	.	.	.	.	.	.	.	.	.	.	.	0
83.0-83.9	.	.	.	.	.	.	.	.	.	.	.	.	0
84.0-84.9	.	.	.	.	.	.	.	.	.	.	.	.	0
85.0-85.9	.	.	.	.	.	.	.	.	.	.	.	.	0
86.0-86.9	.	.	.	.	.	.	.	.	.	.	.	.	0
87.0-87.9	.	.	.	.	.	.	.	.	.	.	.	.	0
88.0-88.9	.	.	.	.	.	.	.	.	.	.	.	.	0
89.0-89.9	.	.	.	.	.	.	.	.	.	.	.	.	0
90.0-90.9	.	.	.	.	.	.	.	.	.	.	.	.	0
91.0-91.9	.	.	.	.	.	.	.	.	.	.	.	.	0
92.0-92.9	.	.	.	.	.	.	.	.	.	.	.	.	0
93.0-93.9	.	.	.	.	.	.	.	.	.	.	.	.	0
94.0-94.9	.	.	.	.	.	.	.	.	.	.	.	.	0
95.0-95.9	.	.	.	.	.	.	.	.	.	.	.	.	0
96.0-96.9	.	.	.	.	.	.	.	.	.	.	.	.	0
97.0-97.9	.	.	.	.	.	.	.	.	.	.	.	.	0
98.0-98.9	.	.	.	.	.	.	.	.	.	.	.	.	0
99.0-99.9	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	904	461	2624	1551	846	1052	1268	1067	200	0	0		58440

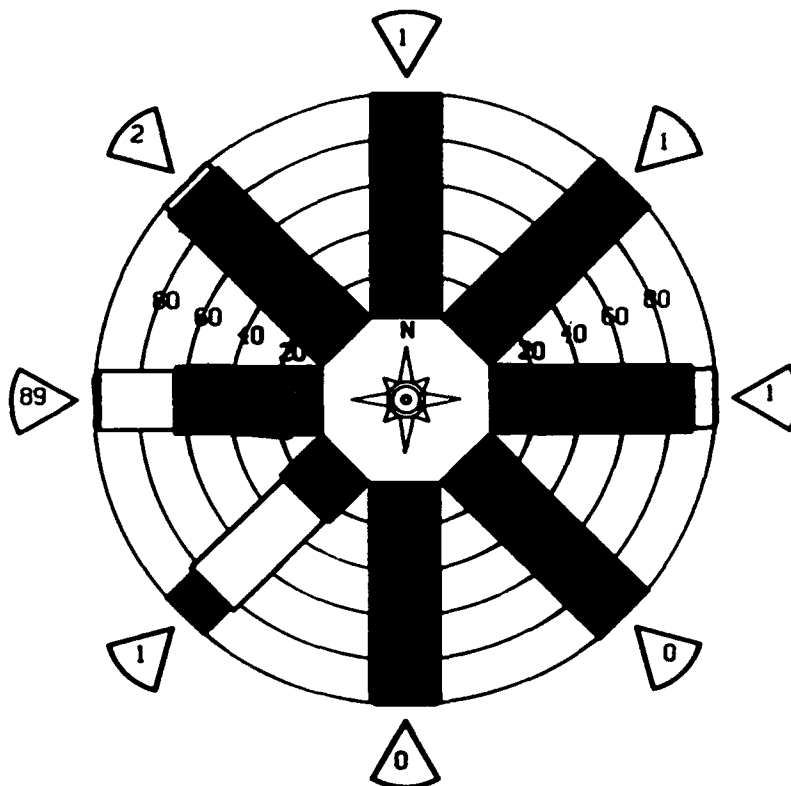
MEAN HS(M) = 0.8 LARGEST HS(M) = 3.1 MEAN TP(SEC) = 9.2 TOTAL CASES = 58440.

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.1 MEAN TP(SEC) = 9.2 TOTAL CASES = 58440.

STATION 7
33.17N, 117.32W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 7 (33.17N 117.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1957	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1958	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1959	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1960	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1961	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1962	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1963	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1964	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1965	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1966	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1967	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1968	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1969	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1970	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1971	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1972	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1973	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1974	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
1975	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7
MEAN	1.1	1.1	1.0	0.9	0.9	0.8	0.6	0.5	0.5	0.6	0.8	1.1	0.7

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 7 (33.17N 117.32W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1957	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1958	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1959	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1960	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1961	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1962	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1963	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1964	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1965	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1966	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1967	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1968	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1969	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1970	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1971	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1972	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1973	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1974	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7
1975	2.1	2.1	2.0	1.9	1.9	1.8	1.6	1.5	1.5	1.6	1.8	2.1	1.7

20 YR. STATISTICS FOR WIS STATION 7 (33.17N 117.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.8
MEAN PEAK WAVE PERIOD (SECONDS) =	9.2
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.5
STANDARD DEVIATION OF TP (SECONDS) =	3.4
LARGEST HS (METERS) =	3.1
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	8.3
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	279.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	74041000

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 0.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	427	.	.	.	.	.	.	.	.	.	427
0.50-0.99	234	.	.	.	.	.	.	.	.	.	234
1.00-1.49	1	1	.	.	.	.	.	.	.	.	1
1.50-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	662	1	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.6 MEAN TP(SEC) = 2.8 NO. OF CASES = 389.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	383	.	.	.	.	.	.	.	.	.	383
0.50-0.99	99	.	.	.	.	.	.	.	.	.	99
1.00-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	482	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.6 NO. OF CASES = 282.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 45.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	578	.	.	.	.	.	.	.	.	.	578
0.50-0.99	147	.	.	.	.	.	.	.	.	.	147
1.00-1.49	.	.	.	.	.	.	.	.	.	.	0
1.50-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	725	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.5 NO. OF CASES = 424.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 67.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	408	.	.	.	.	.	.	.	.	.	408
0.50-0.99	260	.	.	.	.	.	.	.	.	.	260
1.00-1.49	6	.	.	.	.	.	.	.	.	.	6
1.50-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	674	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.6 NO. OF CASES = 395.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 90.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	254	1	.	.	.	.	.	.	.	.	.	254
0.5-0.99	385	29	.	.	.	.	.	.	.	.	.	414
1.0-1.49	99	10	.	.	.	.	.	.	.	.	.	109
1.5-1.99	6	5	.	.	.	.	.	.	.	.	.	11
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	.	0
6.5-6.99	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.49	.	.	.	.	.	.	.	.	.	.	.	0
7.5-7.99	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.49	.	.	.	.	.	.	.	.	.	.	.	0
8.5-8.99	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.49	.	.	.	.	.	.	.	.	.	.	.	0
9.5-9.99	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	744	86	0	0	0	0	0	0	0	0	0	830

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.6 MEAN TP(SEC) = 3.3 NO. OF CASES = 487.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 112.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	73	.	.	.	.	.	.	.	.	.	.	73
0.5-0.99	10	15	.	.	.	.	.	.	.	.	.	25
1.0-1.49	.	1	.	.	.	.	.	.	.	.	.	1
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	113	21	1	0	0	0	0	0	0	0	0	134

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 2.8 NO. OF CASES = 81.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 135.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	51	.	.	.	.	.	.	.	.	.	.	51
0.5-0.99	1	5	.	.	.	.	.	.	.	.	.	6
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	52	6	0	0	0	0	0	0	0	0	0	58

MEAN HS(M) = 0.3 LARGEST HS(M) = 1.5 MEAN TP(SEC) = 2.1 NO. OF CASES = 35.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 157.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	30	.	.	.	.	.	.	.	.	.	.	30
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	30	0	0	0	0	0	0	0	0	0	0	30

MEAN HS(M) = 0.1 LARGEST HS(M) = 0.3 MEAN TP(SEC) = 1.4 NO. OF CASES = 18.

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0												35
0.1	0												10
0.2	0												34
0.3	0												14
0.4	0												3
0.5	0												3
0.6	0												0
0.7	0												0
0.8	0												0
0.9	0												0
1.0	0												0
TOTAL		35	1	15	37	8	3	0	0	0	0	0	62
MEAN HS(M) = 1.3		LARGEST HS(M) = 3.1		MEAN TP(SEC) = 6.1		NO. OF CASES = 62							

HEIGHT(METERS)				PERIOD(SECONDS)								TOTAL			
				<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.0	0.0	0.0	65	3	5	1	.	.	.	.	.	.	.	71
0.1	0.1	0.1	0.1	1	10	11	15	10	3	1	1	.	.	.	31
0.2	0.2	0.2	0.2	.	1	65	107	327	63	.	.	.	.	.	151
0.3	0.3	0.3	0.3	.	.	25	44	11	.	.	.	.	.	.	100
0.4	0.4	0.4	0.4	.	.	1	3	.	.	.	.	.	.	.	53
0.5	0.5	0.5	0.5	.	.	.	.	.	.	.	.	.	.	.	8
0.6	0.6	0.6	0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0.7	0.7	0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0.8	0.8	0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0.9	0.9	0.9	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL				66	14	178	267	80	14	9	1	0	0	0	
MEAN HS(M) = 1.5				LARGEST HS(M) = 3.1				MEAN TP(SEC) = 7.9				NO. OF CASES = 376.			

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	1												1
95	1												1
90	1												1
85	1												1
80	1												1
75	1												1
70	1												1
65	1												1
60	1												1
55	1												1
50	1												1
45	1												1
40	1												1
35	1												1
30	1												1
25	1												1
20	1												1
15	1												1
10	1												1
5	1												1
TOTAL		75	195	1105	859	444	368	294	125	6	0	0	2040
MEAN HS(M) = 1.4		LARGEST HS(M) = 3.0		MEAN TP(SEC) = 8.9		NO. OF CASES = 2040.							

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD(SECONDS)

TOTAL[illegible]

MEAN HS(M) = 0.9 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 9.6 NO. OF CASES = 51399.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD (SECONDS)

TOTAL

	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0	239	3	1	1	8	1	.	.	.	.	243
1	219	140	61	82	41	23	.	.	.	.	250
2	22	66	33	12	1	5	.	.	.	.	201
3	.	112	16	17	3	.	.	.	.	.	303
4	.	.	29	18	.	3	.	.	.	.	43
5	.	.	5	1	.	.	.	.	.	.	6
6	.	.	.	.	.	.	.	.	.	.	1
7	.	.	.	.	.	.	.	.	.	.	0
8	.	.	.	.	.	.	.	.	.	.	0
9	.	.	.	.	.	.	.	.	.	.	0
10+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	471	915	585	240	53	29	6	0	0	0	0

MEAN HS(M) = 1.1 LARGEST HS(M) = 3.4 MEAN TP(SEC) = 5.8 NO. OF CASES = 1352.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD (SECONDS)

TOTAL[illegible]

MEAN HS(M) = 0.6 LARGEST HS(M) = 1.6 MEAN TP(SEC) = 3.3 NO. OF CASES = 630.

STATION 8 33.17N 117.52W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD (SECONDS)

TOTAL[illegible]

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.7 MEAN TP(SEC) = 3.1 NO. OF CASES = 449.

TOTAL

MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.2	1.2	1.1	1.0	1.0	0.9	0.7	0.6	0.6	0.7	0.9	1.2	

MONTH

[illegible]

20 YR. STATISTICS FOR HIS STATION 8 (33.17N 117.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.9
MEAN PEAK WAVE PERIOD (SECONDS) =	9.1
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.5
STANDARD DEVIATION OF TP (SECONDS) =	3.0
LARGEST HS (METERS) =	3.4
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	7.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	265.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	74041000

STATION 9 33.33N 117.52W AZIMUTH(DEGREES) = 0.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)	TOTAL
	<4.4 4.4- 6.0 6.1- 8.0 8.1- 9.5 9.6- 10.5 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	
0.0 - 0.49	2640	2640
0.5 - 0.99	285	285
1.0 - 1.49	.	.
1.5 - 1.99	.	.
2.0 - 2.49	.	.
2.5 - 2.99	.	.
3.0 - 3.49	.	.
3.5 - 3.99	.	.
4.0 - 4.49	.	.
4.5 - 4.99	.	.
5.0 - 5.49	.	.
5.5 - 5.99	.	.
6.0 - 6.49	.	.
6.5 - 6.99	.	.
7.0 - 7.49	.	.
7.5 - 7.99	.	.
8.0 - 8.49	.	.
8.5 - 8.99	.	.
9.0 - 9.49	.	.
9.5 - 9.99	.	.
10.0 - 10.49	.	.
10.5 - 10.99	.	.
11.0 - 11.49	.	.
11.5 - 11.99	.	.
12.0 - 12.49	.	.
12.5 - 12.99	.	.
13.0 - 13.49	.	.
13.5 - 13.99	.	.
14.0 - 14.49	.	.
14.5 - 14.99	.	.
15.0 - 15.49	.	.
15.5 - 15.99	.	.
16.0 - 16.49	.	.
16.5 - 16.99	.	.
17.0 - 17.49	.	.
17.5 - 17.99	.	.
18.0 - 18.49	.	.
18.5 - 18.99	.	.
19.0 - 19.49	.	.
19.5 - 19.99	.	.
20.0 - 20.49	.	.
20.5 - 20.99	.	.
21.0 - 21.49	.	.
21.5 - 21.99	.	.
22.0 - 22.49	.	.
22.5 - 22.99	.	.
23.0 - 23.49	.	.
23.5 - 23.99	.	.
24.0 - 24.49	.	.
24.5 - 24.99	.	.
25.0 - 25.49	.	.
25.5 - 25.99	.	.
26.0 - 26.49	.	.
26.5 - 26.99	.	.
27.0 - 27.49	.	.
27.5 - 27.99	.	.
28.0 - 28.49	.	.
28.5 - 28.99	.	.
29.0 - 29.49	.	.
29.5 - 29.99	.	.
30.0 - 30.49	.	.
30.5 - 30.99	.	.
31.0 - 31.49	.	.
31.5 - 31.99	.	.
32.0 - 32.49	.	.
32.5 - 32.99	.	.
33.0 - 33.49	.	.
33.5 - 33.99	.	.
34.0 - 34.49	.	.
34.5 - 34.99	.	.
35.0 - 35.49	.	.
35.5 - 35.99	.	.
36.0 - 36.49	.	.
36.5 - 36.99	.	.
37.0 - 37.49	.	.
37.5 - 37.99	.	.
38.0 - 38.49	.	.
38.5 - 38.99	.	.
39.0 - 39.49	.	.
39.5 - 39.99	.	.
40.0 - 40.49	.	.
40.5 - 40.99	.	.
41.0 - 41.49	.	.
41.5 - 41.99	.	.
42.0 - 42.49	.	.
42.5 - 42.99	.	.
43.0 - 43.49	.	.
43.5 - 43.99	.	.
44.0 - 44.49	.	.
44.5 - 44.99	.	.
45.0 - 45.49	.	.
45.5 - 45.99	.	.
46.0 - 46.49	.	.
46.5 - 46.99	.	.
47.0 - 47.49	.	.
47.5 - 47.99	.	.
48.0 - 48.49	.	.
48.5 - 48.99	.	.
49.0 - 49.49	.	.
49.5 - 49.99	.	.
50.0 - 50.49	.	.
50.5 - 50.99	.	.
51.0 - 51.49	.	.
51.5 - 51.99	.	.
52.0 - 52.49	.	.
52.5 - 52.99	.	.
53.0 - 53.49	.	.
53.5 - 53.99	.	.
54.0 - 54.49	.	.
54.5 - 54.99	.	.
55.0 - 55.49	.	.
55.5 - 55.99	.	.
56.0 - 56.49	.	.
56.5 - 56.99	.	.
57.0 - 57.49	.	.
57.5 - 57.99	.	.
58.0 - 58.49	.	.
58.5 - 58.99	.	.
59.0 - 59.49	.	.
59.5 - 59.99	.	.
60.0 - 60.49	.	.
60.5 - 60.99	.	.
61.0 - 61.49	.	.
61.5 - 61.99	.	.
62.0 - 62.49	.	.
62.5 - 62.99	.	.
63.0 - 63.49	.	.
63.5 - 63.99	.	.
64.0 - 64.49	.	.
64.5 - 64.99	.	.
65.0 - 65.49	.	.
65.5 - 65.99	.	.
66.0 - 66.49	.	.
66.5 - 66.99	.	.
67.0 - 67.49	.	.
67.5 - 67.99	.	.
68.0 - 68.49	.	.
68.5 - 68.99	.	.
69.0 - 69.49	.	.
69.5 - 69.99	.	.
70.0 - 70.49	.	.
70.5 - 70.99	.	.
71.0 - 71.49	.	.
71.5 - 71.99	.	.
72.0 - 72.49	.	.
72.5 - 72.99	.	.
73.0 - 73.49	.	.
73.5 - 73.99	.	.
74.0 - 74.49	.	.
74.5 - 74.99	.	.
75.0 - 75.49	.	.
75.5 - 75.99	.	.
76.0 - 76.49	.	.
76.5 - 76.99	.	.
77.0 - 77.49	.	.
77.5 - 77.99	.	.
78.0 - 78.49	.	.
78.5 - 78.99	.	.
79.0 - 79.49	.	.
79.5 - 79.99	.	.
80.0 - 80.49	.	.
80.5 - 80.99	.	.
81.0 - 81.49	.	.
81.5 - 81.99	.	.
82.0 - 82.49	.	.
82.5 - 82.99	.	.
83.0 - 83.49	.	.
83.5 - 83.99	.	.
84.0 - 84.49	.	.
84.5 - 84.99	.	.
85.0 - 85.49	.	.
85.5 - 85.99	.	.
86.0 - 86.49	.	.
86.5 - 86.99	.	.
87.0 - 87.49	.	.
87.5 - 87.99	.	.
88.0 - 88.49	.	.
88.5 - 88.99	.	.
89.0 - 89.49	.	.
89.5 - 89.99	.	.
90.0 - 90.49	.	.
90.5 - 90.99	.	.
91.0 - 91.49	.	.
91.5 - 91.99	.	.
92.0 - 92.49	.	.
92.5 - 92.99	.	.
93.0 - 93.49	.	.
93.5 - 93.99	.	.
94.0 - 94.49	.	.
94.5 - 94.99	.	.
95.0 - 95.49	.	.
95.5 - 95.99	.	.
96.0 - 96.49	.	.
96.5 - 96.99	.	.
97.0 - 97.49	.	.
97.5 - 97.99	.	.
98.0 - 98.49	.	.
98.5 - 98.99	.	.
99.0 - 99.49	.	.
99.5 - 99.99	.	.
TOTAL	2925 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2640

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.5 NO. OF CASES = 1710.

STATION 9 33.33N 117.52W AZIMUTH(DEGREES) = 22.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)	TOTAL
	<4.4 4.4- 6.0 6.1- 8.0 8.1- 9.5 9.6- 10.5 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	
0.0 - 0.49	1822	1822
0.5 - 0.99	136	136
1.0 - 1.49	1	1
1.5 - 1.99	.	.
2.0 - 2.49	.	.
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94.0 - 94.49	.	.
94.5 - 94.99	.	.
95.0 - 95.49	.	.

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	1204	.	.	.	.	.	.	.	.	.	.	1204
0.1	1	1400	.	.	.	.	.	.	.	.	.	.	1400
0.2	2	2400	.	.	.	.	.	.	.	.	.	.	2400
0.3	3	2400	.	.	.	.	.	.	.	.	.	.	2400
0.4	4	2400	.	.	.	.	.	.	.	.	.	.	2400
0.5	5	2400	.	.	.	.	.	.	.	.	.	.	2400
0.6	6	2400	.	.	.	.	.	.	.	.	.	.	2400
0.7	7	2400	.	.	.	.	.	.	.	.	.	.	2400
0.8	8	2400	.	.	.	.	.	.	.	.	.	.	2400
0.9	9	2400	.	.	.	.	.	.	.	.	.	.	2400
1.0	0	2400	.	.	.	.	.	.	.	.	.	.	2400
1.1	1	2400	.	.	.	.	.	.	.	.	.	.	2400
1.2	2	2400	.	.	.	.	.	.	.	.	.	.	2400
1.3	3	2400	.	.	.	.	.	.	.	.	.	.	2400
1.4	4	2400	.	.	.	.	.	.	.	.	.	.	2400
1.5	5	2400	.	.	.	.	.	.	.	.	.	.	2400
1.6	6	2400	.	.	.	.	.	.	.	.	.	.	2400
1.7	7	2400	.	.	.	.	.	.	.	.	.	.	2400
1.8	8	2400	.	.	.	.	.	.	.	.	.	.	2400
1.9	9	2400	.	.	.	.	.	.	.	.	.	.	2400
2.0	0	2400	.	.	.	.	.	.	.	.	.	.	2400
2.1	1	2400	.	.	.	.	.	.	.	.	.	.	2400
2.2	2	2400	.	.	.	.	.	.	.	.	.	.	2400
2.3	3	2400	.	.	.	.	.	.	.	.	.	.	2400
2.4	4	2400	.	.	.	.	.	.	.	.	.	.	2400
2.5	5	2400	.	.	.	.	.	.	.	.	.	.	2400
2.6	6	2400	.	.	.	.	.	.	.	.	.	.	2400
2.7	7	2400	.	.	.	.	.	.	.	.	.	.	2400
2.8	8	2400	.	.	.	.	.	.	.	.	.	.	2400
2.9	9	2400	.	.	.	.	.	.	.	.	.	.	2400
3.0	0	2400	.	.	.	.	.	.	.	.	.	.	2400
3.1	1	2400	.	.	.	.	.	.	.	.	.	.	2400
3.2	2	2400	.	.	.	.	.	.	.	.	.	.	2400
3.3	3	2400	.	.	.	.	.	.	.	.	.	.	2400
3.4	4	2400	.	.	.	.	.	.	.	.	.	.	2400
3.5	5	2400	.	.	.	.	.	.	.	.	.	.	2400
3.6	6	2400	.	.	.	.	.	.	.	.	.	.	2400
3.7	7	2400	.	.	.	.	.	.	.	.	.	.	2400
3.8	8	2400	.	.	.	.	.	.	.	.	.	.	2400
3.9	9	2400	.	.	.	.	.	.	.	.	.	.	2400
4.0	0	2400	.	.	.	.	.	.	.	.	.	.	2400
4.1	1	2400						

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.00	436	.	.	.	.	.	.	.	.	.	.	.	436	
0.05	104	.	.	.	.	.	.	.	.	.	.	.	104	
0.10	17	3	.	.	.	.	.	.	.	.	.	.	20	
0.15	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.20	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.25	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.30	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.35	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.40	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.45	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.50	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.55	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.60	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.65	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.70	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.75	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.80	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.85	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.90	.	.	.	.	.	.	.	.	.	.	.	.	0	
0.95	.	.	.	.	.	.	.	.	.	.	.	.	0	
1.00	.	.	.	.	.	.	.	.	.	.	.	.	0	
TOTAL	557	3	0	0	0	0	0	0	0	0	0	0	328	
MEAN HS(M) = 0.3		LARGEST HS(M) = 1.3		MEAN TP(SEC) = 2.2		NO. OF CASES = 328.								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	
0	275	.	.	.	.	.	.	.	.	.	.	.	275
0.00	13	.	.	.	.	.	.	.	.	.	.	.	13
0.05	.	.	.	.	.	.	.	.	.	.	.	.	.
0.10	.	.	.	.	.	.	.	.	.	.	.	.	.
0.15	.	.	.	.	.	.	.	.	.	.	.	.	.
0.20	.	.	.	.	.	.	.	.	.	.	.	.	.
0.25	.	.	.	.	.	.	.	.	.	.	.	.	.
0.30	.	.	.	.	.	.	.	.	.	.	.	.	.
0.35	.	.	.	.	.	.	.	.	.	.	.	.	.
0.40	.	.	.	.	.	.	.	.	.	.	.	.	.
0.45	.	.	.	.	.	.	.	.	.	.	.	.	.
0.50	.	.	.	.	.	.	.	.	.	.	.	.	.
0.55	.	.	.	.	.	.	.	.	.	.	.	.	.
0.60	.	.	.	.	.	.	.	.	.	.	.	.	.
0.65	.	.	.	.	.	.	.	.	.	.	.	.	.
0.70	.	.	.	.	.	.	.	.	.	.	.	.	.
0.75	.	.	.	.	.	.	.	.	.	.	.	.	.
0.80	.	.	.	.	.	.	.	.	.	.	.	.	.
0.85	.	.	.	.	.	.	.	.	.	.	.	.	.
0.90	.	.	.	.	.	.	.	.	.	.	.	.	.
0.95	.	.	.	.	.	.	.	.	.	.	.	.	.
1.00	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	288	0	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.2		LARGEST HS(M) = 0.8		MEAN TP(SEC) = 1.7		NO. OF CASES = 169.							

[illegible]

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	297			10	15	10		3					323	
0.1	11		1	15	18	10							118	
0.2	1		30	126	107	45	1						111	
0.3				18	82	66	5						111	
0.4					13	6	15		3				111	
0.5													167	
0.6													24	
0.7													1	
0.8													0	
0.9													0	
1.0													0	
TOTAL		309	82	537	488	173	27	22	4	0	0	0	970	
MEAN HS(M) =	1.1	LARGEST HS(M) =		3.0	MEAN TP(SEC) =		7.0	NO. OF CASES =		970.				

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	408			205	71	38	112	71	11	11	6		1017	
0.1	41			941	362	150	385	508	410	136	3		3125	
0.2				544	277	174	208	578	953	405			3227	
0.3				82	80	63	68	174	331	309	1		1116	
0.4				3	6	22	5	47	11	109			270	
0.5								5		11			27	
0.6													0	
0.7													0	
0.8													0	
0.9													0	
TOTAL		449	377	1775	796	439	778	1383	1794	981	10	0		
MEAN HS(M) = 1.0		LARGEST HS(M) = 2.6		MEAN TP(SEC) = 10.8		NO. OF CASES = 5148.								

STATION 9 33.33N 117.52W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	785	102	4113	2667	2808	3939	2902	734	34		
0.5-0.99	302	105	6545	4342	2838	4945	7575	5937	402		
1.0-1.49	66	235	1439	1534	5500	588	1297	2850	862		
1.5-1.99		5	77	272	200	54	73	280	177		
2.0-2.49			15	6	3	3	10	25	5		
2.5-2.99											
3.0-3.49											
3.5-3.99											
4.0-4.49											
4.5-4.99											
5.0-5.49											
5.5-5.99											
6.0-6.49											
6.5-6.99											
7.0-7.49											
7.5-7.99											
8.0-8.49											
8.5-8.99											
9.0-9.49											
9.5-9.99											
TOTAL	1153	1926	12192	8821	6399	9529	11858	9826	1480	8	0

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.8 MEAN TP(SEC) = 10.5 NO. OF CASES = 36942.

STATION 9 33.33N 117.52W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	1211										
0.5-0.99	1211										
1.0-1.49	227	32									
1.5-1.99		32									
2.0-2.49											
2.5-2.99											
3.0-3.49											
3.5-3.99											
4.0-4.49											
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5.5-5.99											
6.0-6.49											
6.5-6.99											
7.0-7.49											
7.5-7.99											
8.0-8.49											
8.5-8.99											
9.0-9.49											
9.5-9.99											
TOTAL	3012	363	5	2	6	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 3.3 NO. OF CASES = 1984.

STATION 9 33.33N 117.52W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	2205										
0.5-0.99	3104										
1.0-1.49	119	11									
1.5-1.99											
2.0-2.49											
2.5-2.99											
3.0-3.49											
3.5-3.99											
4.0-4.49											
4.5-4.99											
5.0-5.49											
5.5-5.99											
6.0-6.49											
6.5-6.99											
7.0-7.49											
7.5-7.99											
8.0-8.49											
8.5-8.99											
9.0-9.49											
9.5-9.99											
TOTAL	5428	11	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.4 MEAN TP(SEC) = 3.1 NO. OF CASES = 3180.

STATION 9 33.33N 117.52W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	2325										
0.5-0.99	1098										
1.0-1.49											
1.5-1.99											
2.0-2.49											
2.5-2.99											
3.0-3.49											
3.5-3.99											
4.0-4.49											
4.5-4.99											
5.0-5.49											
5.5-5.99											
6.0-6.49											
6.5-6.99											
7.0-7.49											
7.5-7.99											
8.0-8.49											
8.5-8.99											
9.0-9.49											
9.5-9.99											
TOTAL	3423	0	0	0	0	0	0	0	0	0	0

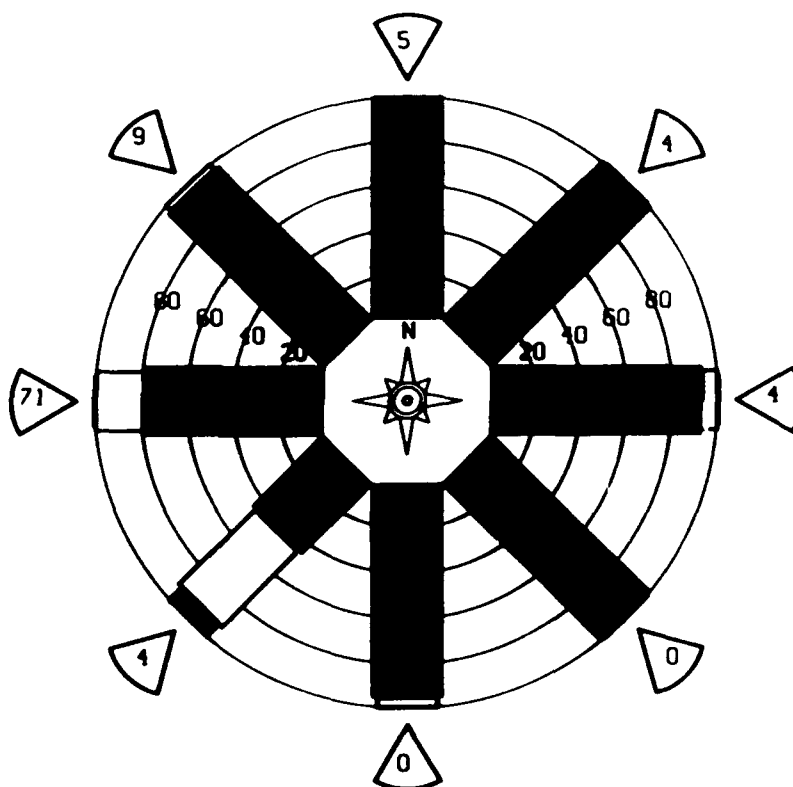
MEAN HS(M) = 0.4 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.7 NO. OF CASES = 2001.

STATION 9 33.33N 117.52W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.9	1759	19	432	275	283	405	297	74	4	..	3548
1.0-1.9	939	78	764	479	300	533	608	635	125	..	2582
2.0-2.9	722	151	221	202	79	180	187	380	126	..	1450
3.0-3.9	..	27	29	49	32	24	24	61	46	..	289
4.0-4.9	4	1	7	2	2	10	11	..	40
5.0-5.9	0
6.0-6.9	0
7.0-7.9	0
8.0-8.9	0
9.0-9.9	0
10.0-10.9	0
11.0-11.9	0
12.0-12.9	0
13.0-13.9	0
14.0-14.9	0
15.0-15.9	0
16.0-16.9	0
17.0-17.9	0
18.0-18.9	0
19.0-19.9	0
20.0-20.9	0
21.0-21.9	0
22.0-22.9	0
23.0-23.9	0
24.0-24.9	0
25.0-25.9	0
26.0-26.9	0
27.0-27.9	0
28.0-28.9	0
29.0-29.9	0
30.0-30.9	0
31.0-31.9	0
32.0-32.9	0
33.0-33.9	0
34.0-34.9	0
35.0-35.9	0
36.0-36.9	0
37.0-37.9	0
38.0-38.9	0
39.0-39.9	0
40.0-40.9	0
41.0-41.9	0
42.0-42.9	0
43.0-43.9	0
44.0-44.9	0
45.0-45.9	0
46.0-46.9	0
47.0-47.9	0
48.0-48.9	0
49.0-49.9	0
50.0-50.9	0
51.0-51.9	0
52.0-52.9	0
53.0-53.9	0
54.0-54.9	0
55.0-55.9	0
56.0-56.9	0
57.0-57.9	0
58.0-58.9	0
59.0-59.9	0
60.0-60.9	0
61.0-61.9	0
62.0-62.9	0
63.0-63.9	0
64.0-64.9	0
65.0-65.9	0
66.0-66.9	0
67.0-67.9	0
68.0-68.9	0
69.0-69.9	0
70.0-70.9	0
71.0-71.9	0
72.0-72.9	0
73.0-73.9	0
74.0-74.9	0
75.0-75.9	0
76.0-76.9	0
77.0-77.9	0
78.0-78.9	0
79.0-79.9	0
80.0-80.9	0
81.0-81.9	0
82.0-82.9	0
83.0-83.9	0
84.0-84.9	0
85.0-85.9	0
86.0-86.9	0
87.0-87.9	0
88.0-88.9	0
89.0-89.9	0
90.0-90.9	0
91.0-91.9	0
92.0-92.9	0
93.0-93.9	0
94.0-94.9	0
95.0-95.9	0
96.0-96.9	0
97.0-97.9	0
98.0-98.9	0
99.0-99.9	0
TOTAL	2772	275	1450	1015	701	1033	1324	1161	243	0	0
MEAN HS(M) =	0.7	LARGEST HS(M) =	3.0	MEAN TP(SEC) =	8.4	TOTAL CASES =	58440				

STATION 9
33.33N, 117.52W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 9 (33.33N 117.52W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.0	0.0	0.7	0.0	0.7	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.9	0.9	0.8	0.7	0.7	0.6	0.5	0.4	0.4	0.5	0.6	0.8	

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 9 (33.33N 117.52W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

20 YR. STATISTICS FOR WIS STATION 9 (33.33N 117.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.7
MEAN PEAK WAVE PERIOD (SECONDS) =	8.4
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	4.3
LARGEST HS (METERS) =	3.0
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	12.5
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	214.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	59021700

TOTAL[illegible][illegible]

1593
116030000000

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.8 NO. OF CASES = 1611.

TOTAL[illegible][illegible]

1380
472
1
0
0
0
0
0
0
0
0
0

MEAN HS(M) = 0.3 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.6 NO. OF CASES = 1084.

TOTAL[illegible][illegible]

1824
506

MEAN HS(M) = 0.3 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.5 NO. OF CASES = 1363.

TOTAL

[illegible][illegible]

1327
802
29
0000000000

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.6 NO. OF CASES = 1262.

STATION 10 33.33N 117.72W AZIMUTH(DEGREES) = 90.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	990	.	.	.	.	.	.	.	.	.	.	990
0.5-0.99	1297	.	.	.	.	.	.	.	.	.	.	1297
1.0-1.49	297	59	.	.	.	.	.	.	.	.	.	356
1.5-1.99	8	1	.	.	.	.	.	.	.	.	.	9
2.0-2.49
2.5-2.99
3.0-3.49
3.5-3.99
4.0-4.49
4.5-4.99
5.0-5.49
5.5-5.99
6.0-6.49
6.5-6.99
7.0-7.49
7.5-7.99
8.0-8.49
8.5-8.99
9.0-9.49
9.5-9.99
10.0-10.49
10.5-10.99
11.0-11.49
11.5-11.99
12.0-12.49
12.5-12.99
13.0-13.49
13.5-13.99
14.0-14.49
14.5-14.99
15.0-15.49
15.5-15.99
16.0-16.49
16.5-16.99
17.0-17.49
17.5-17.99
18.0-18.49
18.5-18.99
19.0-19.49
19.5-19.99
20.0-20.49
20.5-20.99
21.0-21.49
21.5-21.99
22.0-22.49
22.5-22.99
23.0-23.49
23.5-23.99
24.0-24.49
24.5-24.99
25.0-25.49
25.5-25.99
26.0-26.49
26.5-26.99
27.0-27.49
27.5-27.99
28.0-28.49
28.5-28.99
29.0-29.49
29.5-29.99
30.0-30.49
30.5-30.99
31.0-31.49
31.5-31.99
32.0-32.49
32.5-32.99
33.0-33.49
33.5-33.99
34.0-34.49
34.5-34.99
35.0-35.49
35.5-35.99
36.0-36.49
36.5-36.99
37.0-37.49
37.5-37.99
38.0-38.49
38.5-38.99
39.0-39.49
39.5-39.99
40.0-40.49
40.5-40.99
41.0-41.49
41.5-41.99
42.0-42.49
42.5-42.99
43.0-43.49
43.5-43.99
44.0-44.49
44.5-44.99
45.0-45.49
45.5-45.99
46.0-46.49
46.5-46.99
47.0-47.49
47.5-47.99
48.0-48.49
48.5-48.99
49.0-49.49
49.5-49.99
50.0-50.49
50.5-50.99
51.0-51.49
51.5-51.99
52.0-52.49
52.5-52.99
53.0-53.49
53.5-53.99
54.0-54.49
54.5-54.99
55.0-55.49
55.5-55.99
56.0-56.49
56.5-56.99
57.0-57.49
57.5-57.99
58.0-58.49
58.5-58.99
59.0-59.49
59.5-59.99
60.0-60.49
60.5-60.99
61.0-61.49
61.5-61.99
62.0-62.49
62.5-62.99
63.0-63.49
63.5-63.99
64.0-64.49
64.5-64.99
65.0-65.49
65.5-65.99
66.0-66.49
66.5-66.99
67.0-67.49
67.5-67.99
68.0-68.49
68.5-68.99
69.0-69.49
69.5-69.99
70.0-70.49
70.5-70.99
71.0-71.49
71.5-71.99
72.0-72.49
72.5-72.99							

STATION 10 33.33N 117.72W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	167	.	.	.	.	.	.	.	.	.	167
0.5-0.99	1	6	1	10	.	.	.	.	.	.	17
1.0-1.49	.	11	5	1	.	.	.	.	.	.	26
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
57.0-57.49	0
57.5-57.99	0
58.0-58.49	0
58.5-58.99	0
59.0-59.49	0
59.5-59.99	0
60.0-60.49	0
60.5-60.99	0
61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
68.0-68.49	0
68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	0
71.5-71.99	0
72.0-72.49	0
72.5-72.99	0
73.0-73.49	0
73.5-73.99	0
74.0-74.49	0
74.5-74.99	0
75.0-75.49	0
75.5-75.99	0
76.0-76.49	0
76.5-76.99	0
77.0-77.49	0
77.5-77.99	0
78.0-78.49	0
78.5-78.99	0
79.0-79.49	0
79.5-79.99	0
80.0-80.49	0
80.5-80.99	0
81.0-81.49	0
81.5-81.99	0
82.0-82.49	0
82.5-82.99	0
83.0-83.49	0
83.5-83.99	0
84.0-84.49	0
84.5-84.99	0
85.0-85.49	0
85.5-85.99	0
86.0-86.49	0
86.5-86.99	0
87.0-87.49	0
87.5-87.99	0
88.0-88.49	0
88.5-88.99	0
89.0-89.49	0
89.5-89.99	.	.</									

STATION 10 33.33N 117.72W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL	
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2		22.3-LONGER
0.00	701	80	3494	2710	2248	3364	2585	708	46	.	.	15936
0.05	285	201	7085	5516	3264	5530	7145	3725	395	.	.	32799
0.10	46	309	1584	2255	763	971	1661	1406	261	.	.	9256
0.15	.	97	73	248	208	95	164	186	30	.	.	1101
0.20	.	1	13	5	6	13	10	.	.	.	.	48
0.25	.	.	.	.	.	.	.	.	.	.	.	1
0.30	.	.	.	.	.	.	.	.	.	.	.	0
0.35	.	.	.	.	.	.	.	.	.	.	.	0
0.40	.	.	.	.	.	.	.	.	.	.	.	0
0.45	.	.	.	.	.	.	.	.	.	.	.	0
0.50	.	.	.	.	.	.	.	.	.	.	.	0
0.55	.	.	.	.	.	.	.	.	.	.	.	0
0.60	.	.	.	.	.	.	.	.	.	.	.	0
0.65	.	.	.	.	.	.	.	.	.	.	.	0
0.70	.	.	.	.	.	.	.	.	.	.	.	0
0.75	.	.	.	.	.	.	.	.	.	.	.	0
0.80	.	.	.	.	.	.	.	.	.	.	.	0
0.85	.	.	.	.	.	.	.	.	.	.	.	0
0.90	.	.	.	.	.	.	.	.	.	.	.	0
0.95	.	.	.	.	.	.	.	.	.	.	.	0
1.00	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1032	688	12250	10387	6489	9973	11565	6025	732	0	0	
MEAN HS(M) =	0.7	LARGEST HS(M) = 2.6		MEAN TP(SEC) = 10.2		NO. OF CASES = 34575.						

STATION 10 33.33N 117.72W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	100	1083	27	289	1358	929	256	44	.	.	.	.	3986
0.1	100	1264	350	1067	1565	1290	506	67	.	.	.	.	6105
0.2	100	195	2188	1021	335	289	225	62	.	.	.	.	4324
0.3	100	.	455	150	114	20	13	22	3	.	.	.	775	
0.4	100	.	3	46	1	1	.	3	.	.	.	.	54
0.5	100	.	.	1	.	.	.	.	.	.	.	.	6
0.6	100	.	.	.	.	.	.	.	.	.	.	.	1
0.7	100	.	.	.	.	.	.	.	.	.	.	.	0
0.8	100	.	.	.	.	.	.	.	.	.	.	.	0
0.9	100	.	.	.	.	.	.	.	.	.	.	.	0
1.0	100	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		2542	3023	2580	3373	2529	1000	200	4	0	0	0		
MEAN HS(M) = 0.8		LARGEST HS(M) = 3.1		MEAN TP(SEC) = 7.2		NO. OF CASES = 8923.								

STATION 10 33.33N 117.72W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 10 33.33N 117.72W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

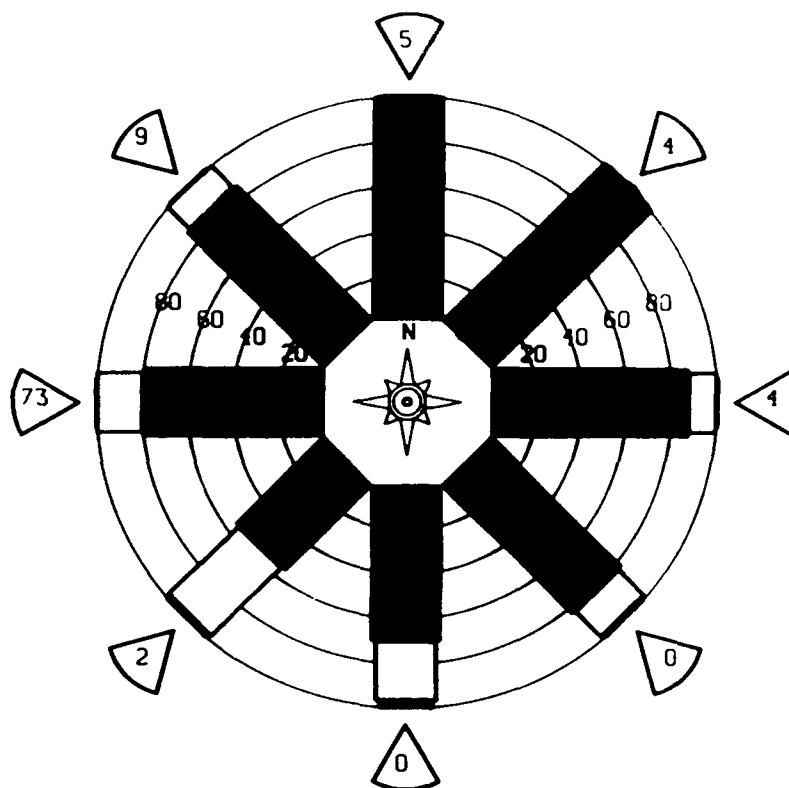
HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	1569	.	.	.	.	.	.	.	.	.	.	.	1569
0.1	1659	.	.	.	.	.	.	.	.	.	.	.	1659
0.2	17	.	.	.	.	.	.	.	.	.	.	.	17
0.3	.	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.	.
1.1	.	.	.	.	.	.	.	.	.	.	.	.	.
1.2	.	.	.	.	.	.	.	.	.	.	.	.	.
1.3	.	.	.	.	.	.	.	.	.	.	.	.	.
1.4	.	.	.	.	.	.	.	.	.	.	.	.	.
1.5	.	.	.	.	.	.	.	.	.	.	.	.	.
1.6	.	.	.	.	.	.	.	.	.	.	.	.	.
1.7	.	.	.	.	.	.	.	.	.	.	.	.	.
1.8	.	.	.	.	.	.	.	.	.	.	.	.	.
1.9	.	.	.	.	.	.	.	.	.	.	.	.	.
2.0	.	.	.	.	.	.	.	.	.	.	.	.	.
2.1	.	.	.	.	.	.	.	.	.	.	.	.	.
2.2	.	.	.	.	.	.	.	.	.	.	.	.	.
2.3	.	.	.	.	.	.	.	.	.	.	.	.	.
2.4	.	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.	.
2.6	.	.	.	.	.	.	.	.	.	.	.	.	.
2.7	.	.	.	.	.	.	.	.	.	.	.	.	.
2.8	.	.	.	.	.	.	.	.	.	.	.	.	.
2.9	.	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.	.
3.1	.	.	.	.	.	.	.	.	.	.	.	.	.
3.2	.	.	.	.	.	.	.	.	.	.	.	.	.
3.3	.	.	.	.	.	.	.	.	.	.	.	.	.
3.4	.	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.	.
3.6	.	.	.	.	.	.	.	.	.	.	.	.	.
3.7	.	.	.	.	.	.	.	.	.	.	.	.	.
3.8	.	.	.	.	.	.	.	.	.	.	.	.	.
3.9	.	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.	.
4.1	.	.	.	.	.	.	.	.	.	.	.	.	.
4.2	.	.	.	.	.	.	.	.	.	.	.	.	.
4.3	.	.	.	.	.	.	.	.	.	.	.	.	.
4.4	.	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.	.
4.6	.	.	.	.	.	.	.	.	.	.	.	.	.
4.7								

STATION 10 33.33N 117.72W FOR ALL DIRECTIONS													TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS													
HEIGHT(METERS)	PERIOD(SECONDS)												
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.49	1394	12	383	423	321	363	263	70	4	.	.	3233	
0.50-0.99	1050	75	358	691	471	617	336	376	39	.	.	4913	
1.00-1.49	80	292	313	267	116	127	185	150	26	.	.	1525	
1.50-1.99	.	73	42	50	25	12	25	25	3	.	.	232	
2.00-2.49	.	.	7	4	1	2	1	.	.	.	.	17
2.50-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2524	454	1603	1435	934	1121	1210	621	72	0	0	58440	
MEAN HS(M) = 0.7 LARGEST HS(M) = 3.1 MEAN TP(SEC) = 8.1 TOTAL CASES = 58440.													

STATION 10
33.33N, 117.72W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 10 (33.33N 117.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.7	0.8	0.7	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.6	0.8	

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 10 (33.33N 117.72W)

	MONTH												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1999	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1998	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1997	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1996	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1995	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1994	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1993	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1992	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1991	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1990	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1989	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1988	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1987	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1986	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1985	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1984	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1983	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1982	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1981	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1980	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1979	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1978	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1977	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1976	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1975	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

20 YR. STATISTICS FOR WIS STATION 10 (33.33N 117.72W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.7
MEAN PEAK WAVE PERIOD (SECONDS) =	8.1
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	3.8
LARGEST HS (METERS) =	3.1
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	7.1
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	290.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	74041000

STATION 11 33.50N 117.72W AZIMUTH(DEGREES) = C.
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	2268	.	.	.	.	.	.	.	.	.	.	2268
0.5-0.99	177	.	.	.	.	.	.	.	.	.	.	177
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
57.0-57.49	0
57.5-57.99	0
58.0-58.49	0
58.5-58.99	0
59.0-59.49	0
59.5-59.99	0
60.0-60.49	0
60.5-60.99	0
61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
68.0-68.49	0
68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	.	.	.									

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	912	.	.	.	.	.	.	.	.	.	.	912
0.5	0.99	1115	.	.	.	.	.	.	.	.	.	.	1115
1.0	1.49	212	.	.	.	.	.	.	.	.	.	.	212
1.5	1.99	17	.	.	.	.	.	.	.	.	.	.	17
2.0	2.49	.	1	.	.	.	.	.	.	.	.	.	1
2.5	2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0	3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5	3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0	4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5	4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0	5.49	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		2256	1	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.6		LARGEST HS(M) = 2.1		MEAN TP(SEC) = 2.9		NO. OF CASES = 1320.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	-	436	.	.	.	.	.	.	.	.	.	.	436
0.5	-	90	.	.	.	.	.	.	.	.	.	.	90
1.0	-	15	1	.	.	.	.	.	.	.	.	.	16
1.5	-	1	.	.	.	.	.	.	.	.	.	.	1
2.0	-	.	1	.	.	.	.	.	.	.	.	.	1
2.5	-	.	.	.	.	.	.	.	.	.	.	.	0
3.0	-	.	.	.	.	.	.	.	.	.	.	.	0
3.5	-	.	.	.	.	.	.	.	.	.	.	.	0
4.0	-	.	.	.	.	.	.	.	.	.	.	.	0
4.5	-	.	.	.	.	.	.	.	.	.	.	.	0
5.0	+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		542	2	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.3		LARGEST HS(M) = 2.1		MEAN TP(SEC) = 2.3		NO. OF CASES = 320.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	
0.0	-	309											309
0.50	-	5	3										8
1.00	-	1											4
1.50	-												0
2.00	-												0
2.50	-												0
3.00	-												0
3.50	-												0
4.00	-												0
4.50	-												0
5.00	+												0
TOTAL		315	6	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.2		LARGEST HS(M) = 1.3		MEAN TP(SEC) = 1.8		NO. OF CASES = 189.							

[illegible]

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	0	172	.	.	.	.	.	.	.	.	.	.	172
0.1	0	10	.	.	.	.	.	.	.	.	.	.	21
0.2	0	.	1	20	3	5	.	.	.	.	.	.	58
0.3	0	.	.	25	5	6	3	.	.	.	.	.	50
0.4	0	.	.	.	.	.	.	.	.	.	.	.	14
0.5	0	.	.	.	.	.	.	.	.	.	.	.	0
0.6	0	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0	.	.	.	.	.	.	.	.	.	.	.	0
1.0	0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		182	1	51	64	11	6	0	0	0	0	0	
MEAN HS(M) = 0.7		LARGEST HS(M) = 2.3		MEAN TP(SEC) = 4.6		NO. OF CASES = 188.							

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	295	35	99	11	5	5	13	1	.	.	.	286
0.1	0	13	105	82	22	5	3	17	1	.	.	.	178
0.2	1	.	3	61	46	6	10	6	.	.	.	.	148
0.3	1	.	.	5	27	.	.	.	1	.	.	.	133
0.4	1	.	.	.	.	.	.	.	.	.	.	.	90
0.5	1	.	.	.	.	.	.	.	.	.	.	.	70
0.6	1	.	.	.	.	.	.	.	.	.	.	.	50
0.7	1	.	.	.	.	.	.	.	.	.	.	.	30
0.8	1	.	.	.	.	.	.	.	.	.	.	.	20
0.9	1	.	.	.	.	.	.	.	.	.	.	.	10
1.0	1	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		299	56	247	107	12	18	36	3	0	0	0	
MEAN HS(M) = 0.8		LARGEST HS(M) = 2.4		MEAN TP(SEC) = 5.7		NO. OF CASES = 463.							

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
10.0	0	311	6	27	80	25	42	11					502
9.5	0	39	58	152	90	73	171	126					737
9.0	0	1	56	99	59	109	128	27					655
8.5	0			34	15	39	18	44	66				250
8.0	0						1		83				15
7.5	0								11				1
7.0	0												0
6.5	0												0
6.0	0												0
5.5	0												0
5.0	0												0
4.5	0												0
4.0	0												0
3.5	0												0
3.0	0												0
2.5	0												0
2.0	0												0
1.5	0												0
1.0	0												0
0.5	0												0
0.0	0												0
TOTAL		351	120	312	244	246	360	307	188	32	0	0	
MEAN HS(M) = 0.9		LARGEST HS(M) = 2.5		MEAN TP(SEC) = 8.9		NO. OF CASES = 1274.							

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	1096	.	.	1	.	.	.	.	.	.	.	1097
0.5	0.99	1221	.	.	.	.	.	.	.	.	.	.	1221
1.0	1.49	6	.	.	.	.	.	.	.	.	.	.	6
1.5	1.99	.	.	.	.	.	.	.	.	.	.	.	0
2.0	2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.5	2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0	3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5	3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0	4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5	4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0	5.49	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		2323	0	0	1	0	0	0	0	0	0	0	
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.1		MEAN TP(SEC) = 2.8		NO. OF CASES = 1360.							

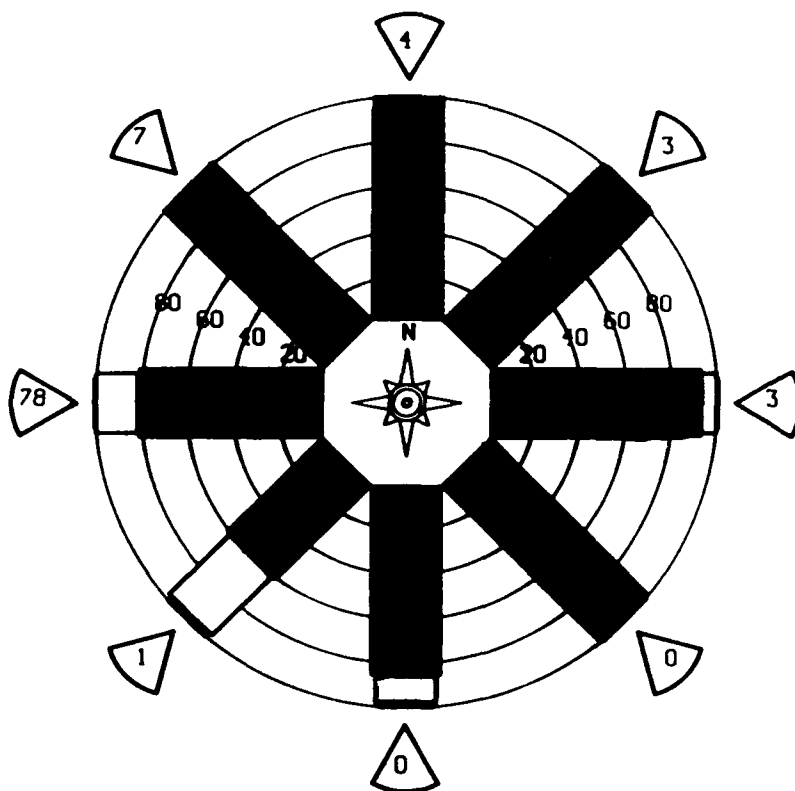
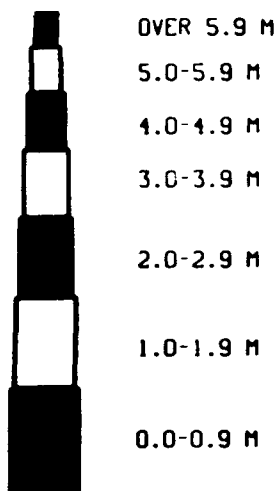
HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.	-	2787	.	.	.	.	.	.	.	.	.	.	2787
0.5	-	1560	.	.	.	.	.	.	.	.	.	.	1560
1.0	-	1	.	.	.	.	.	.	.	.	.	.	1
1.5	-	.	.	.	.	.	.	.	.	.	.	.	.
2.0	-	.	.	.	.	.	.	.	.	.	.	.	.
2.5	-	.	.	.	.	.	.	.	.	.	.	.	.
3.0	-	.	.	.	.	.	.	.	.	.	.	.	.
3.5	-	.	.	.	.	.	.	.	.	.	.	.	.
4.0	-	.	.	.	.	.	.	.	.	.	.	.	.
4.5	-	.	.	.	.	.	.	.	.	.	.	.	.
5.0	-	.	.	.	.	.	.	.	.	.	.	.	.
5.5	-	.	.	.	.	.	.	.	.	.	.	.	.
6.0	-	.	.	.	.	.	.	.	.	.	.	.	.
6.5	-	.	.	.	.	.	.	.	.	.	.	.	.
7.0	-	.	.	.	.	.	.	.	.	.	.	.	.
7.5	-	.	.	.	.	.	.	.	.	.	.	.	.
8.0	-	.	.	.	.	.	.	.	.	.	.	.	.
8.5	-	.	.	.	.	.	.	.	.	.	.	.	.
9.0	-	.	.	.	.	.	.	.	.	.	.	.	.
9.5	-	.	.	.	.	.	.	.	.	.	.	.	.
10.0	-	.	.	.	.	.	.	.	.	.	.	.	.
10.5	-	.	.	.	.	.	.	.	.	.	.	.	.
11.0	-	.	.	.	.	.	.	.	.	.	.	.	.
11.5	-	.	.	.	.	.	.	.	.	.	.	.	.
12.0	-	.	.	.	.	.	.	.	.	.	.	.	.
12.5	-	.	.	.	.	.	.	.	.	.	.	.	.
13.0	-	.	.	.	.	.	.	.	.	.	.	.	.
13.5	-	.	.	.	.	.	.	.	.	.	.	.	.
14.0	-	.	.	.	.	.	.	.	.	.	.	.	.
14.5	-	.	.	.	.	.	.	.	.	.	.	.	.
15.0	-	.	.	.	.	.	.	.	.	.	.	.	.
15.5	-	.	.	.	.	.	.	.	.	.	.	.	.
16.0	-	.	.	.	.	.	.	.	.	.	.	.	.
16.5	-	.	.	.	.	.	.	.	.	.	.	.	.
17.0	-	.	.	.	.	.	.	.	.	.	.	.	.
17.5	-	.	.	.	.	.	.	.	.	.	.	.	.
18.0	-	.	.	.	.	.	.	.	.	.	.	.	.
18.5	-	.	.	.	.	.	.	.	.	.	.	.	.
19.0	-	.	.	.	.	.	.	.	.	.	.	.	.
19.5	-	.	.	.	.	.	.	.	.	.	.	.	.
20.0	-	.	.	.	.	.	.	.	.	.	.	.	.
20.5	-	.	.	.	.	.	.	.	.	.	.	.	.
21.0	-	.	.	.	.	.	.	.	.	.	.	.	.
21.5	-	.	.	.	.	.	.	.	.	.	.	.	.
22.0	-	.	.	.	.	.	.	.	.	.	.	.	.
22.5	-	.	.	.	.	.	.	.	.	.	.	.	.
23.0	-								

[illegible]

STATION 11 33.50N 117.72W FOR ALL DIRECTIONS													TOTAL	
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS														
HEIGHT(METERS)	PERIOD(SECONDS)													
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER			
0.0-0.49	1634	49	457	467	435	443	195	29	2	.	.	3671		
0.5-0.99	611	255	712	664	516	846	941	353	27	.	.	4715		
1.0-1.49	29	3	99	146	103	152	350	370	73	.	.	1347		
1.5-1.99	.	.	15	22	20	13	42	78	30	.	.	225		
2.0-2.49	200		
2.5-2.99	000		
3.0-3.49	000		
3.5-3.99	000		
4.0-4.99	000		
5.0-5.99	000		
6.0-6.99	000		
7.0-7.99	000		
8.0-8.99	000		
9.0-9.99	000		
10.0-10.99	000		
11.0-11.99	000		
12.0-12.99	000		
13.0-13.99	000		
14.0-14.99	000		
15.0-15.99	000		
16.0-16.99	000		
17.0-17.99	000		
18.0-18.99	000		
19.0-19.99	000		
20.0-20.99	000		
21.0-21.99	000		
22.0-22.99	000		
23.0-23.99	000		
24.0-24.99	000		
25.0-25.99	000		
26.0-26.99	000		
27.0-27.99	000		
28.0-28.99	000		
29.0-29.99	000		
30.0-30.99	000		
31.0-31.99	000		
32.0-32.99	000		
33.0-33.99	000		
34.0-34.99	000		
35.0-35.99	000		
36.0-36.99	000		
37.0-37.99	000		
38.0-38.99	000		
39.0-39.99	000		
40.0-40.99	000		
41.0-41.99	000		
42.0-42.99	000		
43.0-43.99	000		
44.0-44.99	000		
45.0-45.99	000		
46.0-46.99	000		
47.0-47.99	000		
48.0-48.99	000		
49.0-49.99	000		
50.0-50.99	000		
51.0-51.99	000		
52.0-52.99	000		
53.0-53.99	000		
54.0-54.99	000		
55.0-55.99	000		
56.0-56.99	000		
57.0-57.99	000		
58.0-58.99	000		
59.0-59.99	000		
60.0-60.99	000		
61.0-61.99	000		
62.0-62.99	000		
63.0-63.99	000		
64.0-64.99	000		
65.0-65.99	000		
66.0-66.99	000		
67.0-67.99	000		
68.0-68.99	000		
69.0-69.99	000		
70.0-70.99	000		
71.0-71.99	000		
72.0-72.99	000		
73.0-73.99	000		
74.0-74.99	000		
75.0-75.99	000		
76.0-76.99	000		
77.0-77.99	000		
78.0-78.99	000		
79.0-79.99	000		
80.0-80.99	000		
81.0-81.99	000		
82.0-82.99	000		
83.0-83.99	000		
84.0-84.99	000		
85.0-85.99	000		
86.0-86.99	000		
87.0-87.99	000		
88.0-88.99	000		
89.0-89.99	000		
90.0-90.99	000		
91.0-91.99	000		
92.0-92.99	000		
93.0-93.99	000		
94.0-94.99	000		
95.0-95.99	000		
96.0-96.99	000		
97.0-97.99	000		
98.0-98.99	000		
99.0-99.99	000		
TOTAL	2276	82	1284	1302	1075	1455	1530	838	136	0	0	58440		

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.5 MEAN TP(SEC) = 8.7 TOTAL CASES = 58440.

STATION 11
33.50N, 117.72W
58440 CASES



MONTH

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 11 (33.50N 117.72W)

20 YR. STATISTICS FOR WIS STATION 11 (33.50N 117.72W)

D68

[illegible]

STATION 12 33.50N 117.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0-0.49	523	.	.	.	.	.	.	.	.	.	523
0.5-0.99	658	.	.	.	.	.	.	.	.	.	658
1.0-1.49	133	27	.	.	.	.	.	.	.	.	160
1.5-1.99	5	11	.	.	.	.	.	.	.	.	16
2.0-2.49	.	5	.	.	.	.	.	.	.	.	5
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
57.0-57.49	0
57.5-57.99	0
58.0-58.49	0
58.5-58.99	0
59.0-59.49	0
59.5-59.99	0
60.0-60.49	0
60.5-60.99	0
61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
68.0-68.49	0
68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	0
71.5-71.99	0
72.0-72.49	0
72.5-72.99	0
73.0-73.49	0
73.5-73.99	0
74.0-74.49	0
74.5-74.99	0
75.0-75.49	0
75.5-75.99	0
76.0-76.49	0
76.5-76.99	0
77.0-77.49	0
77.5-77.99	0
78.0-78.49	0
78.5-78.99	0
79.0-79.49	0
79.5-79.99	0
80.0-80.49	0
80.5-80.99	0
81.0-81.49	0
81.5-81.99	0
82.0-82.49	0
82.5-82.99	0
83.0-83.49	0
83.5-83.99	0
84.0-84.49	0
84.5-84.99	0
85.0-85.49	0
85.5-85.99	0
86.0-86.49	0
86.5-86.99	0
87.0-87.49	0
87.5-87.99	0
88.0-88.49	0
88.5-88.99	0
89.0-89.49	0
89.5-89.99	.	.									

STATION 12 33.50N 117.92W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER
0.0-0.49	131	1	3	6	.	.	.	.	.	.	141
0.5-0.99	.	15	6	2	.	.	.	.	.	.	13
1.0-1.49	44
1.5-1.99	6
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
57.0-57.49	0
57.5-57.99	0
58.0-58.49	0
58.5-58.99	0
59.0-59.49	0
59.5-59.99	0
60.0-60.49	0
60.5-60.99	0
61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
68.0-68.49	0
68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	0
71.5-71.99	0
72.0-72.49	0
72.5-72.99	0
73.0-73.49	0
73.5-73.99	0
74.0-74.49	0
74.5-74.99	0
75.0-75.49	0
75.5-75.99	0
76.0-76.49	0
76.5-76.99	0
77.0-77.49	0
77.5-77.99	0
78.0-78.49	0
78.5-78.99	0
79.0-79.49	0
79.5-79.99	0
80.0-80.49	0
80.5-80.99	0
81.0-81.49	0
81.5-81.99	0
82.0-82.49	0
82.5-82.99	0
83.0-83.49	0
83.5-83.99	0
84.0-84.49	0
84.5-84.99	0
85.0-85.49	0
85.5-85.99	0
86.0-86.49	0
86.5-86.99	0
87.0-87.49	0
87.5-87.99	0
88.0-88.49	0
88.5-88.99	0
89.0-89.49	0
89.5-89.99	.	.									

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	414	58	3754	5349	3596	2873	1009	155	17	.	.	17225		
0.1	184	244	7084	7715	6656	9209	7890	2176	135	.	.	41293		
0.2	15	304	1984	2479	1577	2797	5309	3182	350	.	.	17697		
0.3	1	56	213	479	352	333	853	1031	167	.	.	3485		
0.4	.	.	27	17	35	15	68	94	29	.	.	285		
0.5	.	.	.	.	.	3	1	.	.	.	.	12
0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		614	662	13070	16039	12216	15230	15130	6638	698	0	0		
MEAN HS(M) = 0.8		LARGEST HS(M) = 2.8		MEAN TP(SEC) = 10.3		NO. OF CASES = 46939.								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.00	684	5	78	366	32	11	.	.	.	.	.	1176
0.1	0.09	787	97	174	516	121	15	.	.	.	.	.	1711
0.2	0.18	123	446	225	160	118	49	.	.	.	.	.	1121
0.3	0.27	.	102	71	22	6	18	5	.	.	.	.	224
0.4	0.36	.	3	15	3	.	.	.	.	.	.	.	21
0.5	0.45	.	.	.	.	.	.	.	.	.	.	.	3
0.6	0.54	.	.	.	1	.	.	.	.	.	.	.	1
0.7	0.63	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0.72	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0.81	.	.	.	.	.	.	.	.	.	.	.	0
1.0	0.90	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		1594	653	566	1068	277	93	6	0	0	0	0	
MEAN HS(M) = 0.8		LARGEST HS(M) = 3.0		MEAN TP(SEC) = 6.0		NO. OF CASES = 2497.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	1095	.	.	.	.	.	.	.	.	.	.	1095
0.1	1767	.	.	.	.	.	.	.	.	.	.	1767
0.2	71	5	.	.	.	.	.	.	.	.	.	76
0.3	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
1.1	.	.	.	.	.	.	.	.	.	.	.	0
1.2	.	.	.	.	.	.	.	.	.	.	.	0
1.3	.	.	.	.	.	.	.	.	.	.	.	0
1.4	.	.	.	.	.	.	.	.	.	.	.	0
1.5	.	.	.	.	.	.	.	.	.	.	.	0
1.6	.	.	.	.	.	.	.	.	.	.	.	0
1.7	.	.	.	.	.	.	.	.	.	.	.	0
1.8	.	.	.	.	.	.	.	.	.	.	.	0
1.9	.	.	.	.	.	.	.	.	.	.	.	0
2.0	.	.	.	.	.	.	.	.	.	.	.	0
2.1	.	.	.	.	.	.	.	.	.	.	.	0
2.2	.	.	.	.	.	.	.	.	.	.	.	0
2.3	.	.	.	.	.	.	.	.	.	.	.	0
2.4	.	.	.	.	.	.	.	.	.	.	.	0
2.5	.	.	.	.	.	.	.	.	.	.	.	0
2.6	.	.	.	.	.	.	.	.	.	.	.	0
2.7	.	.	.	.	.	.	.	.	.	.	.	0
2.8	.	.	.	.	.	.	.	.	.	.	.	0
2.9	0	
3.0	0	
3.1	0	
3.2	0	
3.3	0	
3.4	0	
3.5	0	
3.6	0	
3.7	0	
3.8	0	
3.9	0	
4.0	0	
4.1	0	
4.2	0	
4.3	0	
4.4	0	
4.5	0	
4.6	0	
4.7	0	
4.8	0	
4.9	.	.	.</										

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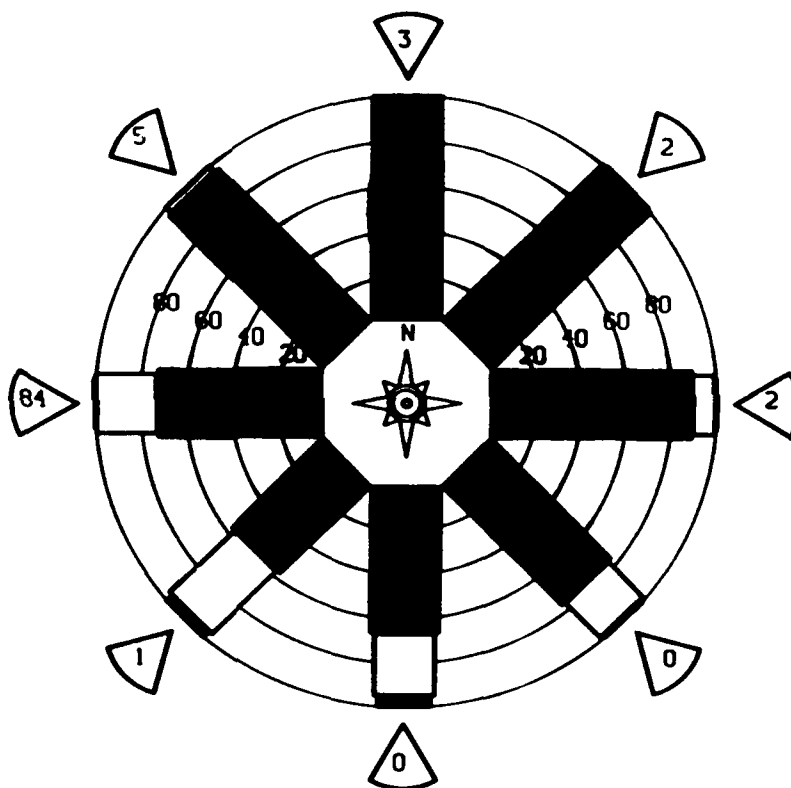
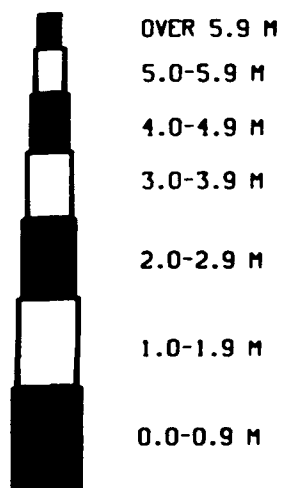
STATION 12 33.50N 117.92W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)												TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.9	958	7	390	589	365	289	101	15	1	.	.	2715	
1.0-1.9	527	40	738	835	684	939	797	218	13	.	.	4789	
2.0-2.9	37	90	236	271	180	295	543	319	35	.	.	2006	
3.0-3.9	.	30	39	59	41	42	93	107	16	.	.	427	
4.0-4.9	.	3	1	6	4	2	7	9	3	.	.	38	
5.0-5.9	1	
6.0-6.9	0	
7.0-7.9	0	
8.0-8.9	0	
9.0-9.9	0	
10.0-10.9	0	
11.0-11.9	0	
12.0-12.9	0	
13.0-13.9	0	
14.0-14.9	0	
15.0-15.9	0	
16.0-16.9	0	
17.0-17.9	0	
18.0-18.9	0	
19.0-19.9	0	
20.0-20.9	0	
21.0-21.9	0	
22.0-22.9	0	
23.0-23.9	0	
24.0-24.9	0	
25.0-25.9	0	
26.0-26.9	0	
27.0-27.9	0	
28.0-28.9	0	
29.0-29.9	0	
30.0-30.9	0	
31.0-31.9	0	
32.0-32.9	0	
33.0-33.9	0	
34.0-34.9	0	
35.0-35.9	0	
36.0-36.9	0	
37.0-37.9	0	
38.0-38.9	0	
39.0-39.9	0	
40.0-40.9	0	
41.0-41.9	0	
42.0-42.9	0	
43.0-43.9	0	
44.0-44.9	0	
45.0-45.9	0	
46.0-46.9	0	
47.0-47.9	0	
48.0-48.9	0	
49.0-49.9	0	
50.0-50.9	0	
51.0-51.9	0	
52.0-52.9	0	
53.0-53.9	0	
54.0-54.9	0	
55.0-55.9	0	
56.0-56.9	0	
57.0-57.9	0	
58.0-58.9	0	
59.0-59.9	0	
60.0-60.9	0	
61.0-61.9	0	
62.0-62.9	0	
63.0-63.9	0	
64.0-64.9	0	
65.0-65.9	0	
66.0-66.9	0	
67.0-67.9	0	
68.0-68.9	0	
69.0-69.9	0	
70.0-70.9	0	
71.0-71.9	0	
72.0-72.9	0	
73.0-73.9	0	
74.0-74.9	0	
75.0-75.9	0	
76.0-76.9	0	
77.0-77.9	0	
78.0-78.9	0	
79.0-79.9	0	
80.0-80.9	0	
81.0-81.9	0	
82.0-82.9	0	
83.0-83.9	0	
84.0-84.9	0	
85.0-85.9	0	
86.0-86.9	0	
87.0-87.9	0	
88.0-88.9	0	
89.0-89.9	0	
90.0-90.9	0	
91.0-91.9	0	
92.0-92.9	0	
93.0-93.9	0	
94.0-94.9	0	
95.0-95.9	0	
96.0-96.9	0	
97.0-97.9	0	
98.0-98.9	0	
99.0-99.9	0	
TOTAL	1520	170	1408	1760	1274	1567	1541	668	68	0	0	58440	

MEAN HS(M) = 0.7 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 9.1 TOTAL CASES = 58440.

MEAN HS(M) = 0.7 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 9.1 TOTAL CASES = 58440.

STATION 12
33.50N, 117.92W
58440 CASES



MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.9	0.7	0.7	0.7	0.8	0.7	0.5	0.6	0.4	0.5	0.7	0.7	0.7
1957	0.9	0.8	0.9	0.8	0.7	0.6	0.6	0.6	0.4	0.7	0.7	0.7	0.8
1958	0.9	0.7	0.8	0.8	0.8	0.7	0.6	0.4	0.5	0.5	0.7	0.7	0.7
1959	0.9	0.9	0.9	0.8	0.6	0.8	0.5	0.4	0.5	0.5	0.6	0.8	0.8
1960	0.8	0.9	0.9	0.6	0.6	0.7	0.4	0.4	0.4	0.5	0.7	0.8	0.7
1961	0.8	0.9	0.9	0.6	0.6	0.6	0.3	0.4	0.4	0.5	0.6	0.9	0.6
1962	0.7	0.9	0.9	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.8	0.8	0.7
1963	0.9	0.9	0.9	0.8	0.8	0.9	0.6	0.4	0.4	0.6	0.8	0.9	0.7
1964	0.8	0.7	0.8	0.8	0.9	0.9	0.7	0.5	0.6	0.7	0.8	1.0	0.8
1965	0.9	0.8	0.8	0.8	0.6	0.9	0.6	0.4	0.5	0.5	0.7	1.1	0.7
1966	0.9	0.8	0.6	0.7	0.7	0.6	0.4	0.4	0.4	0.5	0.5	1.1	0.6
1967	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.4	0.4	0.5	0.7	1.1	0.7
1968	0.9	0.9	0.9	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.9	1.0	0.8
1969	0.9	0.9	0.9	0.9	0.8	0.7	0.5	0.5	0.5	0.5	0.7	1.1	0.8
1970	0.9	0.9	0.9	0.9	0.8	0.6	0.6	0.4	0.5	0.5	0.7	1.1	0.8
1971	0.9	0.9	0.9	0.9	0.8	0.6	0.6	0.4	0.5	0.5	0.7	1.1	0.7
1972	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.5	0.5	0.5	0.7	1.1	0.7
1973	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.5	0.5	0.5	0.7	1.1	0.7
1974	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.5	0.5	0.5	0.7	1.1	0.7
1975	0.9	0.9	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.5	0.7	1.1	0.7
MEAN	0.9	0.9	0.9	0.8	0.7	0.7	0.5	0.5	0.5	0.6	0.7	1.0	0.6

MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	1	2	3	4	5	6	7	8	9	10	11	12
1957	1	2	3	4	5	6	7	8	9	10	11	12
1958	1	2	3	4	5	6	7	8	9	10	11	12
1959	1	2	3	4	5	6	7	8	9	10	11	12
1960	1	2	3	4	5	6	7	8	9	10	11	12
1961	1	2	3	4	5	6	7	8	9	10	11	12
1962	1	2	3	4	5	6	7	8	9	10	11	12
1963	1	2	3	4	5	6	7	8	9	10	11	12
1964	1	2	3	4	5	6	7	8	9	10	11	12
1965	1	2	3	4	5	6	7	8	9	10	11	12
1966	1	2	3	4	5	6	7	8	9	10	11	12
1967	1	2	3	4	5	6	7	8	9	10	11	12
1968	1	2	3	4	5	6	7	8	9	10	11	12
1969	1	2	3	4	5	6	7	8	9	10	11	12
1970	1	2	3	4	5	6	7	8	9	10	11	12
1971	1	2	3	4	5	6	7	8	9	10	11	12
1972	1	2	3	4	5	6	7	8	9	10	11	12
1973	1	2	3	4	5	6	7	8	9	10	11	12
1974	1	2	3	4	5	6	7	8	9	10	11	12
1975	1	2	3	4	5	6	7	8	9	10	11	12

20 YR. STATISTICS FOR WIS STATION 12 (33.50N 117.92W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.7
MEAN PEAK WAVE PERIOD (SECONDS) =	9.1
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	3.4
LARGEST HS (METERS) =	3.0
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	8.3
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	282.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	74041000

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
100	888	.	.	.	.	.	.	.	.	.	.	.	888
90	734	.	.	.	.	.	.	.	.	.	.	.	734
80	3	.	.	.	.	.	.	.	.	.	.	.	3
70	.	.	.	.	.	.	.	.	.	.	.	.	.
60	.	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
30	.	.	.	.	.	.	.	.	.	.	.	.	.
20	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
0	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	1625	0	0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4		LARGEST HS(M) = 1.0		MEAN TP(SEC) = 2.9		NO. OF CASES = 950.							

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.0	759	1	.	.	.	.	.	.	.	.	.	759
0.1	0.1	278	.	.	.	.	.	.	.	.	.	.	278
0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	0
0.3	0.3	.	.	.	.	.	.	.	.	.	.	.	0
0.4	0.4	.	.	.	.	.	.	.	.	.	.	.	0
0.5	0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	1.0	.	.	.	.	.	.	.	.	.	.	.	0
1.1	1.1	.	.	.	.	.	.	.	.	.	.	.	0
1.2	1.2	.	.	.	.	.	.	.	.	.	.	.	0
1.3	1.3	.	.	.	.	.	.	.	.	.	.	.	0
1.4	1.4	.	.	.	.	.	.	.	.	.	.	.	0
1.5	1.5	.	.	.	.	.	.	.	.	.	.	.	0
1.6	1.6	.	.	.	.	.	.	.	.	.	.	.	0
1.7	1.7	.	.	.	.	.	.	.	.	.	.	.	0
1.8	1.8	.	.	.	.	.	.	.	.	.	.	.	0
1.9	1.9	.	.	.	.	.	.	.	.	.	.	.	0
2.0	2.0	.	.	.	.	.	.	.	.	.	.	.	0
2.1	2.1	.	.	.	.	.	.	.	.	.	.	.	0
2.2	2.2	.	.	.	.	.	.	.	.	.	.	.	0
2.3	2.3	.	.	.	.	.	.	.	.	.	.	.	0
2.4	2.4	.	.	.	.	.	.	.	.	.	.	.	0
2.5	2.5	.	.	.	.	.	.	.	.	.	.	.	0
2.6	2.6	.	.	.	.	.	.	.	.	.	.	.	0
2.7	2.7	.	.	.	.	.	.	.	.	.	.	.	0
2.8	2.8	.	.	.	.	.	.	.	.	.	.	.	0
2.9	2.9	.	.	.	.	.	.	.	.	.	.	.	0
3.0	3.0	.	.	.	.	.	.	.	.	.	.	.	0
3.1	3.1	.	.	.	.	.	.	.	.	.	.	.	0
3.2	3.2	.	.	.	.	.	.	.	.	.	.	.	0
3.3	3.3	.	.	.	.	.	.	.	.	.	.	.	0
3.4	3.4	.	.	.	.	.	.	.	.	.	.	.	0
3.5	3.5	.	.	.	.	.	.	.	.	.	.	.	0
3.6	3.6	.	.	.	.	.	.	.	.	.	.	.	0
3.7	3.7	.	.	.	.	.	.	.	.	.	.	.	0
3.8	3.8	.	.	.	.	.	.	.	.	.	.	.	0
3.9	3.9	.	.	.	.	.	.	.	.	.	.	.	0
4.0	4.0	.	.	.	.	.	.	.	.	.	.	.	0
4.1	4.1	.	.	.	.	.	.	.	.	.	.	.	0
4.2	4.2	.	.	.	.	.	.	.	.	.	.	.	0
4.3	4.3	.	.	.	.	.	.	.	.	.	.	.	0
4.4	4.4	.											

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.4	0.0-0.4	900	.	.	.	.	.	.	.	.	.	.	900
0.5-0.9	0.5-0.9	231	.	.	.	.	.	.	.	.	.	.	231
1.0-1.4	1.0-1.4	.	.	.	.	.	.	.	.	.	.	.	.
1.5-1.9	1.5-1.9	.	.	.	.	.	.	.	.	.	.	.	.
2.0-2.4	2.0-2.4	.	.	.	.	.	.	.	.	.	.	.	.
2.5-2.9	2.5-2.9	.	.	.	.	.	.	.	.	.	.	.	.
3.0-3.4	3.0-3.4	.	.	.	.	.	.	.	.	.	.	.	.
3.5-3.9	3.5-3.9	.	.	.	.	.	.	.	.	.	.	.	.
4.0-4.4	4.0-4.4	.	.	.	.	.	.	.	.	.	.	.	.
4.5-4.9	4.5-4.9	.	.	.	.	.	.	.	.	.	.	.	.
5.0-5.4	5.0-5.4	.	.	.	.	.	.	.	.	.	.	.	.
5.5-5.9	5.5-5.9	.	.	.	.	.	.	.	.	.	.	.	.
6.0-6.4	6.0-6.4	.	.	.	.	.	.	.	.	.	.	.	.
6.5-6.9	6.5-6.9	.	.	.	.	.	.	.	.	.	.	.	.
7.0-7.4	7.0-7.4	.	.	.	.	.	.	.	.	.	.	.	.
7.5-7.9	7.5-7.9	.	.	.	.	.	.	.	.	.	.	.	.
8.0-8.4	8.0-8.4	.	.	.	.	.	.	.	.	.	.	.	.
8.5-8.9	8.5-8.9	.	.	.	.	.	.	.	.	.	.	.	.
9.0-9.4	9.0-9.4	.	.	.	.	.	.	.	.	.	.	.	.
9.5-9.9	9.5-9.9	.	.	.	.	.	.	.	.	.	.	.	.
10.0-10.4	10.0-10.4	.	.	.	.	.	.	.	.	.	.	.	.
10.5-10.9	10.5-10.9	.	.	.	.	.	.	.	.	.	.	.	.
11.0-11.4	11.0-11.4	.	.	.	.	.	.	.	.	.	.	.	.
11.5-11.9	11.5-11.9	.	.	.	.	.	.	.	.	.	.	.	.
12.0-12.4	12.0-12.4	.	.	.	.	.	.	.	.	.	.	.	.
12.5-12.9	12.5-12.9	.	.	.	.	.	.	.	.	.	.	.	.
13.0-13.4	13.0-13.4	.	.	.	.	.	.	.	.	.	.	.	.
13.5-13.9	13.5-13.9	.	.	.	.	.	.	.	.	.	.	.	.
14.0-14.4	14.0-14.4	.	.	.	.	.	.	.	.	.	.	.	.
14.5-14.9	14.5-14.9	.	.	.	.	.	.	.	.	.	.	.	.
15.0-15.4	15.0-15.4	.	.	.	.	.	.	.	.	.	.	.	.
15.5-15.9	15.5-15.9	.	.	.	.	.	.	.	.	.	.	.	.
16.0-16.4	16.0-16.4	.	.	.	.	.	.	.	.	.	.	.	.
16.5-16.9	16.5-16.9	.	.	.	.	.	.	.	.	.	.	.	.
17.0-17.4	17.0-17.4	.	.	.	.	.	.	.	.	.	.	.	.
17.5-17.9	17.5-17.9	.	.	.	.	.	.	.	.	.	.	.	.
18.0-18.4	18.0-18.4	.	.	.	.	.	.	.	.	.	.	.	.
18.5-18.9	18.5-18.9	.	.	.	.	.	.	.	.	.	.	.	.
19.0-19.4	19.0-19.4	.	.	.	.	.	.	.	.	.	.	.	.
19.5-19.9	19.5-19.9	.	.	.	.	.	.	.	.	.	.	.	.
20.0-20.4	20.0-20.4								

[illegible]

STATION 13 33.50N 118.12W AZIMUTH(DEGREES) = 90.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	427	1	.	.	.	.	.	.	.	.	.	427
0.5	398	1	.	.	.	.	.	.	.	.	.	.
1.0	53	20	.	.	.	.	.	.	.	.	.	20
1.5	.	3	.	.	.	.	.	.	.	.	.	3
2.0	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.
5.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	878	68	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 2.9 NO. OF CASES = 555.

STATION 13 33.50N 118.12W AZIMUTH(DEGREES) = 112.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	121	1	.	.	.	.	.	.	.	.	.	121
0.5	29	1	.	.	.	.	.	.	.	.	.	30
1.0	1	68	.	.	.	.	.	.	.	.	.	69
1.5	.	87	.	.	.	.	.	.	.	.	.	107
2.0	.	1	20	.	.	.	.	.	.	.	.	24
2.5	.	1	3	.	.	.	.	.	.	.	.	7
3.0	.	.	6	.	.	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	151	158	49	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.0 LARGEST HS(M) = 2.8 MEAN TP(SEC) = 4.1 NO. OF CASES = 213.

STATION 13 33.50N 118.12W AZIMUTH(DEGREES) = 135.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	75	1	.	.	.	.	.	.	.	.	.	75
0.5	5	1	.	.	.	.	.	.	.	.	.	6
1.0	.	25	.	.	.	.	.	.	.	.	.	26
1.5	.	.	13	.	.	.	.	.	.	.	.	38
2.0	.	.	3	.	.	.	.	.	.	.	.	3
2.5	.	.	.	.	.	.	.	.	.	.	.	0
3.0	.	.	.	.	.	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	80	51	20	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.8 LARGEST HS(M) = 2.8 MEAN TP(SEC) = 3.5 NO. OF CASES = 91.

STATION 13 33.50N 118.12W AZIMUTH(DEGREES) = 157.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	54	1	.	.	.	.	.	.	.	.	.	54
0.5	.	1	.	.	.	.	.	.	.	.	.	3
1.0	.	5	.	.	.	.	.	.	.	.	.	11
1.5	.	.	5	1	.	.	.	.	.	.	.	10
2.0	6
2.5	0
3.0	0
3.5	0
4.0	0
4.5	0
5.0	0
TOTAL	54	19	10	1	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 2.9 NO. OF CASES = 51.

[illegible][illegible]

HEIGHT(METERS)				PERIOD(SECONDS)								TOTAL			
				<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	0	0	0	109	17	44	35	20	18	10	.	.	.	.	189
0.1	0.1	0.1	0.1	5	17	53	66	8	5	22	.	.	.	.	189
0.2	0.2	0.2	0.2	.	8	49	23	8	30	18	.	.	.	.	122
0.3	0.3	0.3	0.3	.	1	25	18	.	.	1	.	.	.	.	108
0.4	0.4	0.4	0.4	.	.	1	6	.	.	.	.	.	.	.	9
0.5	0.5	0.5	0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	0.6	0.6	0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0.7	0.7	0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0.8	0.8	0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0.9	0.9	0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	1.0	1.0	1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL				114	43	172	147	34	54	50	3	0	0	0	
MEAN HS(M) = 0.9				LARGEST HS(M) = 2.2				MEAN TP(SEC) = 7.4				NO. OF CASES = 370.			

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	165			47	49	20	11						292
0.1	6			34	104	49	100						393
0.2			46	20	18	73	68	54					302
0.3			10	11	6	18	35	51	11				168
0.4			1				1	1	10	1			14
0.5													0
0.6													0
0.7													0
0.8													0
0.9													0
1.0													0
TOTAL		171	87	112	177	160	215	188	58	1	0	0	
MEAN HS(M) = 0.9		LARGEST HS(M) = 2.3		MEAN TP(SEC) = 8.9		NO. OF CASES = 695.							

[illegible]

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4~ 6.0	6.1~ 8.0	8.1~ 9.5	9.6~ 10.5	10.6~ 11.7	11.8~ 13.3	13.4~ 15.3	15.4~ 18.1	18.2~ 22.2	22.3~ LONGER	
0.0	545	49	166	333	1425	313	11	.	.	.	.	7347
0.1	561	1582	398	503	3211	1279	107	.	.	.	.	14645
0.2	47	220	256	165	942	886	210	15	.	.	.	7904
0.3	1	.	136	46	152	77	126	10	1	.	.	1709
0.4	.	.	13	1	34	1	18	1	.	.	.	206
0.5	.	.	.	.	.	.	.	.	.	.	.	17
0.6	.	.	.	.	.	.	.	.	.	.	.	4
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1154	2311	9025	10518	5765	2556	472	29	2	0	0	
MEAN HS(M) = 0.8 LARGEST HS(M) = 3.3 MEAN TP(SEC) = 8.3 NO. OF CASES = 18617.												

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	924												924
0.1	1507												1507
0.2	100												100
0.3													
0.4													
0.5													
0.6													
0.7													
0.8													
0.9													
1.0													
1.1													
1.2													
1.3													
1.4													
1.5													
1.6													
1.7													
1.8													
1.9													
2.0													
2.1													
2.2													
2.3													
2.4													
2.5													
2.6													
2.7													
2.8													
2.9													
3.0													
3.1													
3.2													
3.3													
3.4													
3.5													
3.6													
3.7													
3.8													
3.9													
4.0													
4.1													
4.2													
4.3													
4.4													
4.5													
4.6													
4.7													

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
10.0	0	795	.	.	.	.	.	.	.	.	.	.	795
9.5	0	1107	.	.	.	.	.	.	.	.	.	.	1107
9.0	0	8	.	.	.	.	.	.	.	.	.	.	8
8.5	0	.	.	.	.	.	.	.	.	.	.	.	.
8.0	0	.	.	.	.	.	.	.	.	.	.	.	.
7.5	0	.	.	.	.	.	.	.	.	.	.	.	.
7.0	0	.	.	.	.	.	.	.	.	.	.	.	.
6.5	0	.	.	.	.	.	.	.	.	.	.	.	.
6.0	0	.	.	.	.	.	.	.	.	.	.	.	.
5.5	0	.	.	.	.	.	.	.	.	.	.	.	.
5.0	0	.	.	.	.	.	.	.	.	.	.	.	.
4.5	0	.	.	.	.	.	.	.	.	.	.	.	.
4.0	0	.	.	.	.	.	.	.	.	.	.	.	.
3.5	0	.	.	.	.	.	.	.	.	.	.	.	.
3.0	0	.	.	.	.	.	.	.	.	.	.	.	.
2.5	0	.	.	.	.	.	.	.	.	.	.	.	.
2.0	0	.	.	.	.	.	.	.	.	.	.	.	.
1.5	0	.	.	.	.	.	.	.	.	.	.	.	.
1.0	0	.	.	.	.	.	.	.	.	.	.	.	.
0.5	0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	1910	0	0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.2		MEAN TP(SEC) = 3.1		NO. OF CASES = 1117.							

STATION 13 33.50N 118.12W FOR ALL DIRECTIONS													TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS													
HEIGHT(METERS)	PERIOD(SECONDS)												
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.5	11.6-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.9	694	6	315	550	284	224	77	12	1	.	.	2163	
1.0-1.9	532	60	215	511	234	251	743	201	11	.	.	4825	
2.0-2.9	24	213	308	342	219	353	601	323	31	.	.	2414	
3.0-3.9	.	41	79	69	44	46	111	113	16	.	.	518	
4.0-4.9	.	1	2	6	5	2	8	12	3	.	.	54	
5.0-5.9	2	
6.0-6.9	0	
7.0-7.9	0	
8.0-8.9	0	
9.0-9.9	0	
10.0-10.9	0	
11.0-11.9	0	
12.0-12.9	0	
13.0-13.9	0	
14.0-14.9	0	
15.0-15.9	0	
16.0-16.9	0	
17.0-17.9	0	
18.0-18.9	0	
19.0-19.9	0	
20.0-20.9	0	
21.0-21.9	0	
22.0-22.9	0	
23.0-23.9	0	
24.0-24.9	0	
25.0-25.9	0	
26.0-26.9	0	
27.0-27.9	0	
28.0-28.9	0	
29.0-29.9	0	
30.0-30.9	0	
31.0-31.9	0	
32.0-32.9	0	
33.0-33.9	0	
34.0-34.9	0	
35.0-35.9	0	
36.0-36.9	0	
37.0-37.9	0	
38.0-38.9	0	
39.0-39.9	0	
40.0-40.9	0	
41.0-41.9	0	
42.0-42.9	0	
43.0-43.9	0	
44.0-44.9	0	
45.0-45.9	0	
46.0-46.9	0	
47.0-47.9	0	
48.0-48.9	0	
49.0-49.9	0	
50.0-50.9	0	
51.0-51.9	0	
52.0-52.9	0	
53.0-53.9	0	
54.0-54.9	0	
55.0-55.9	0	
56.0-56.9	0	
57.0-57.9	0	
58.0-58.9	0	
59.0-59.9	0	
60.0-60.9	0	
61.0-61.9	0	
62.0-62.9	0	
63.0-63.9	0	
64.0-64.9	0	
65.0-65.9	0	
66.0-66.9	0	
67.0-67.9	0	
68.0-68.9	0	
69.0-69.9	0	
70.0-70.9	0	
71.0-71.9	0	
72.0-72.9	0	
73.0-73.9	0	
74.0-74.9	0	
75.0-75.9	0	
76.0-76.9	0	
77.0-77.9	0	
78.0-78.9	0	
79.0-79.9	0	
80.0-80.9	0	
81.0-81.9	0	
82.0-82.9	0	
83.0-83.9	0	
84.0-84.9	0	
85.0-85.9	0	
86.0-86.9	0	
87.0-87.9	0	
88.0-88.9	0	
89.0-89.9	0	
90.0-90.9	0	
91.0-91.9	0	
92.0-92.9	0	
93.0-93.9	0	
94.0-94.9	0	
95.0-95.9	0	
96.0-96.9	0	
97.0-97.9	0	
98.0-98.9	0	
99.0-99.9	0	
TOTAL	1250	321	1433	1878	1286	1546	1540	660	62	0	0	58440	

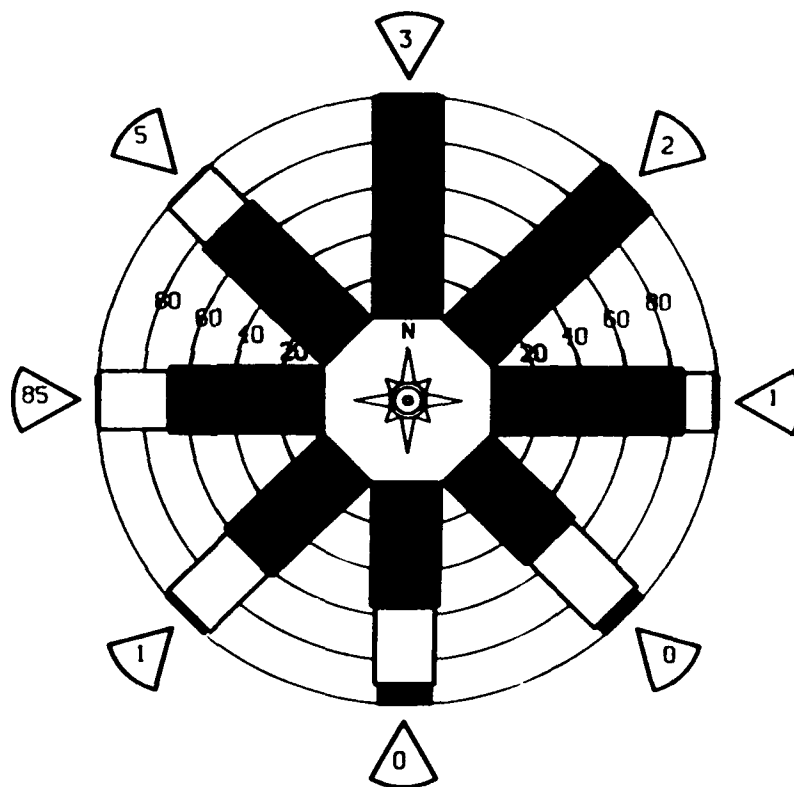
MEAN HS(M) = 0.8 LARGEST HS(M) = 3.3 MEAN TP(SEC) = 9.2 TOTAL CASES = 58440.

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.3 MEAN TP(SEC) = 9.2 TOTAL CASES = 58440.

STATION 13
33.50N, 118.12W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MEAN HS (METERS) BY MONTH AND YEAR
HIS STATION 13 (33.50N 118.12W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.9	1.0	0.9	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.8	1.0	

LARGEST HS (METERS) BY MONTH AND YEAR
HIS STATION 13 (33.50N 118.12W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

20 YR. STATISTICS FOR HIS STATION 13 (33.50N 118.12W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 0.8
 MEAN PEAK WAVE PERIOD (SECONDS) = 9.2
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.4
 STANDARD DEVIATION OF TP (SECONDS) = 3.3
 LARGEST HS (METERS) = 3.3
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 8.3
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 292.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 74041000

TOTAL[illegible][illegible]

9788000000000

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.8 MEAN TP(SEC) = 2.4 NO. OF CASES = 619.

TOTAL[illegible][illegible]

662
6100000000

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.4 NO. OF CASES = 423.

TOTAL[illegible][illegible][illegible]

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.5 NO. OF CASES = 538.

TOTAL

[illegible][illegible]

446
30

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.7 NO. OF CASES = 442

STATION 14 33.67N 118.12W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	338	.	.	.	.	.	.	.	.	.	338
0.1	352	.	.	.	.	.	.	.	.	.	352
0.2	400	.	.	.	.	.	.	.	.	.	400
0.3	5	.	.	.	.	.	.	.	.	.	5
0.4	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.
1.1	.	.	.	.	.	.	.	.	.	.	.
1.2	.	.	.	.	.	.	.	.	.	.	.
1.3	.	.	.	.	.	.	.	.	.	.	.
1.4	.	.	.	.	.	.	.	.	.	.	.
1.5	.	.	.	.	.	.	.	.	.	.	.
1.6	.	.	.	.	.	.	.	.	.	.	.
1.7	.	.	.	.	.	.	.	.	.	.	.
1.8	.	.	.	.	.	.	.	.	.	.	.
1.9	.	.	.	.	.	.	.	.	.	.	.
2.0	.	.	.	.	.	.	.	.	.	.	.
2.1	.	.	.	.	.	.	.	.	.	.	.
2.2	.	.	.	.	.	.	.	.	.	.	.
2.3	.	.	.	.	.	.	.	.	.	.	.
2.4	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.
2.6	.	.	.	.	.	.	.	.	.	.	.
2.7	.	.	.	.	.	.	.	.	.	.	.
2.8	.	.	.	.	.	.	.	.	.	.	.
2.9	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	744	0	0	0	0	0	0	0	0	0	744
MEAN HS(M) =	0.5										LARGEST HS(M) = 1.6
MEAN TP(SEC) =	2.8										NO. OF CASES = 436

STATION 14 33.67N 118.12W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	107	.	.	.	.	.	.	.	.	.	107
0.1	3	.	.	.	.	.	.	.	.	.	3
0.2	1	1	.	.	.	.	.	.	.	.	2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
TOTAL	111	1	0	0	0	0	0	0	0	0	112
MEAN HS(M) =	0.3										LARGEST HS(M) = 1.9
MEAN TP(SEC) =	2.1										NO. OF CASES = 67

STATION 14 33.67N 118.12W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	106	.	.	.	.	.	.	.	.	.	106
0.1	1	.	.	.	.	.	.	.	.	.	2
0.2	.	1	3	.	.	.	.	.	.	.	4
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
TOTAL	107	7	3	0	0	0	0	0	0	0	117
MEAN HS(M) =	0.3										LARGEST HS(M) = 2.1
MEAN TP(SEC) =	2.1										NO. OF CASES = 70

STATION 14 33.67N 118.12W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	53	.	.	.	.	.	.	.	.	.	53
0.1	3	.	.	.	.	.	.	.	.	.	6
0.2	.	2	.	.	.	.	.	.	.	.	2
0.3	.	5	.	.	.	.	.	.	.	.	5
0.4	.	.	1	.	.	.	.	.	.	.	1
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
TOTAL	56	30	2	0	0	0	0	0	0	0	88
MEAN HS(M) =	0.6										LARGEST HS(M) = 2.0
MEAN TP(SEC) =	3.2										NO. OF CASES = 53

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	.												129
0.1	.												32
0.2	.												30
0.3	.												32
0.4	.												1
0.5	.												0
0.6	.												0
0.7	.												0
0.8	.												0
0.9	.												0
1.0	.												0
1.1	.												0
1.2	.												0
1.3	.												0
1.4	.												0
1.5	.												0
1.6	.												0
1.7	.												0
1.8	.												0
1.9	.												0
2.0	.												0
2.1	.												0
2.2	.												0
2.3	.												0
2.4	.												0
2.5	.												0
2.6	.												0
2.7	.												0
2.8	.												0
2.9	.												0
3.0	.												0
3.1	.												0
3.2	.												0
3.3	.												0
3.4	.												0
3.5	.												0
3.6	.												0
3.7	.												0
3.8	.												0
3.9	.												0
4.0	.												0
4.1	.												0
4.2	.												0
4.3	.												0
4.4	.												0
4.5	.												0
4.6	.												

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
10.0	75			25	27	17	1		1				129
9.5	1		1	25	51	16							101
9.0			13	15	11	10	6						74
8.5				6	5	8	1		5		1		23
8.0													24
7.5													0
7.0													0
6.5													0
6.0													0
5.5													0
5.0													0
4.5													0
4.0													0
3.5													0
3.0													0
2.5													0
2.0													0
1.5													0
1.0													0
0.5													0
TOTAL	76	6	76	95	53	11	26	7	0	1	0		
MEAN HS(M) = 0.8		LARGEST HS(M) = 2.3		MEAN TP(SEC) = 7.6		NO. OF CASES = 215.							

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	106		17	53	66	6	18						266
0.1	8		8	75	138	22	130						179
0.2	20		20	18	54	51	69	56	16				129
0.3				8	27	49	47	97	30				73
0.4					5	17	27	68	10				50
0.5													0
0.6													0
0.7													0
0.8													0
0.9													0
1.0													0
TOTAL		114	45	154	290	205	288	229	76	13	3	0	
MEAN HS(M) = 1.0		LARGEST HS(M) = 2.5		MEAN TP(SEC) = 9.6		NO. OF CASES = 838.							

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	200	740	4594	6098	2630	1516	357	80	1	8	.	16224
0.1	0	100	778	12058	7505	6293	8359	5402	1006	58	6	.	41565
0.2	1		121	2547	3798	1663	3542	3076	277	2	3	.	20563
0.3	1		8	126	785	752	1096	2154	2758	682	3	.	8364
0.4	1			5	66	177	169	518	812	528	.	.	2275
0.5	1				3	15	32	148	266	159	.	.	626
0.6	1							20	80	34	.	.	134
0.7	1									5	.	.	5
0.8	1										.	.	0
0.9	1										.	.	0
1.0	1										.	.	0
TOTAL		301	1647	19333	18255	11530	14714	14134	8078	1744	20	0	
MEAN HS(M) = 0.9		LARGEST HS(M) = 3.5		MEAN TP(SEC) = 10.1		NO. OF CASES = 52470.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	0	381	.	.	.	.	.	.	.	.	.	.	381
0.1	0	381	.	.	.	.	.	.	.	.	.	.	381
0.2	0	.	.	1	.	.	.	.	.	.	.	.	1
0.3	0	.	.	.	.	.	.	.	.	.	.	.	0
0.4	0	.	.	.	.	.	.	.	.	.	.	.	0
0.5	0	.	.	.	.	.	.	.	.	.	.	.	0
0.6	0	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0	.	.	.	.	.	.	.	.	.	.	.	0
1.0	0	.	.	.	.	.	.	.	.	.	.	.	0
1.1	0	.	.	.	.	.	.	.	.	.	.	.	0
1.2	0	.	.	.	.	.	.	.	.	.	.	.	0
1.3	0	.	.	.	.	.	.	.	.	.	.	.	0
1.4	0	.	.	.	.	.	.	.	.	.	.	.	0
1.5	0	.	.	.	.	.	.	.	.	.	.	.	0
1.6	0	.	.	.	.	.	.	.	.	.	.	.	0
1.7	0	.	.	.	.	.	.	.	.	.	.	.	0
1.8	0	.	.	.	.	.	.	.	.	.	.	.	0
1.9	0	.	.	.	.	.	.	.	.	.	.	.	0
2.0	0	.	.	.	.	.	.	.	.	.	.	.	0
2.1	0	.	.	.	.	.	.	.	.	.	.	.	0
2.2	0	.	.	.	.	.	.	.	.	.	.	.	0
2.3	0	.	.	.	.	.	.	.	.	.	.	.	0
2.4	0	.	.	.	.	.	.	.	.	.	.	.	0
2.5	0	.	.	.	.	.	.	.	.	.	.	.	0
2.6	0	.	.	.	.	.	.	.	.	.	.	.	0
2.7	0	.	.	.	.	.	.	.	.	.	.	.	0
2.8	0	.	.	.	.	.	.	.	.	.	.	.	0
2.9	0	.	.	.	.	.	.	.	.	.	.	.	0
3.0	0	.	.	.	.	.	.	.	.	.	.	.	0
3.1	0	.	.	.	.	.	.	.	.	.	.	.	0
3.2	0	.	.	.	.	.	.	.	.	.	.	.	0
3.3	0	.	.	.	.	.	.	.	.	.	.	.	0
3.4	0	.	.	.	.	.	.	.	.	.	.	.	0
3.5	0	.	.	.	.	.	.	.	.	.	.	.	0
3.6	0	.	.	.	.	.	.	.	.	.	.	.	0
3.7	0	.	.	.	.	.	.	.	.	.	.	.	0
3.8	0	.	.	.	.	.	.	.	.	.	.	.	0
3.9	0	.	.	.	.	.	.	.	.	.	.	.	0
4.0	0	.	.	.	.	.	.	.	.	.	.	.	0
4.1	0	.	.	.	.	.	.	.	.	.	.	.	0
4.2	0	.	.	.	.	.	.	.	.	.	.	.	0
4.3	0	.	.	.	.	.	.	.	.	.	.	.	0
4.4	0	.	.	.	.	.	.	.	.	.	.	.	0
4.5	0	.	.	.	.	.	.	.	.	.	.	.	0
4.6	0	.	.	.	.	.	.	.	.	.	.	.	0
4.7	0	.	.	.	.	.	.	.	.	.	.	.	0
4.8	0	.	.	.	.	.	.	.	.	.	.	.	0
4.9	0	.	.	.	.	.	.	.	.	.	.	.	0
5.0	0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		762	0	1	0	0	1	0	0	0	0	0	
MEAN HS(M) = 0.4		LARGEST HS(M) = 1.6		MEAN TP(SEC) = 2.8		NO. OF CASES = 448.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
1000	1000	1026	.	.	.	.	.	.	.	.	.	.	1026
900	900	535	.	.	.	.	.	.	.	.	.	.	535
800	800	1	.	.	.	.	.	.	.	.	.	.	1
700	700	.	.	.	.	.	.	.	.	.	.	.	.
600	600	.	.	.	.	.	.	.	.	.	.	.	.
500	500	.	.	.	.	.	.	.	.	.	.	.	.
400	400	.	.	.	.	.	.	.	.	.	.	.	.
300	300	.	.	.	.	.	.	.	.	.	.	.	.
200	200	.	.	.	.	.	.	.	.	.	.	.	.
100	100	.	.	.	.	.	.	.	.	.	.	.	.
0	0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL		1562	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.4		LARGEST HS(M) = 1.0		MEAN TP(SEC) = 2.7		NO. OF CASES = 914.							

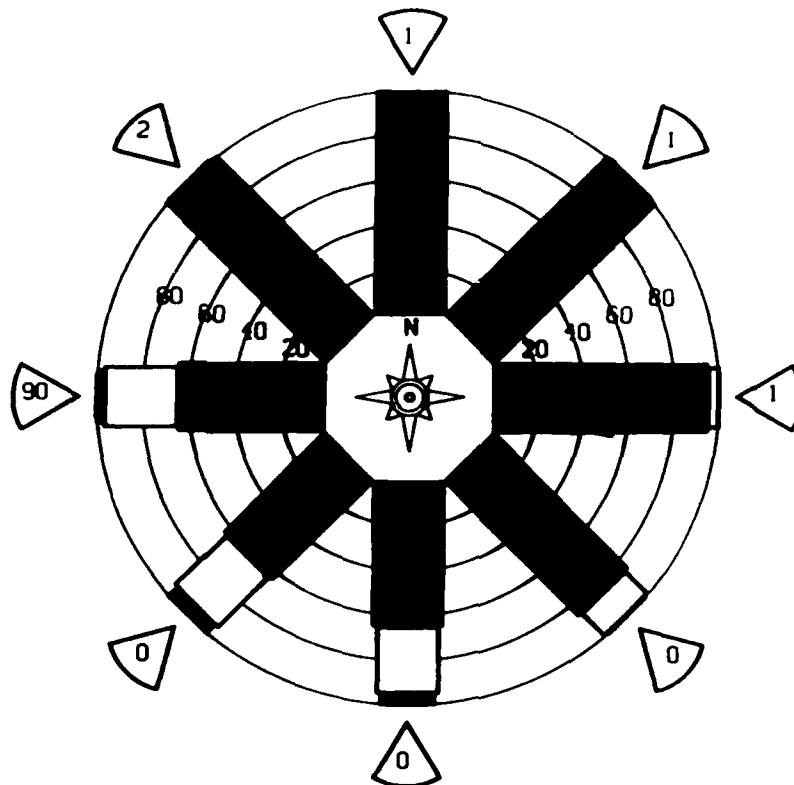
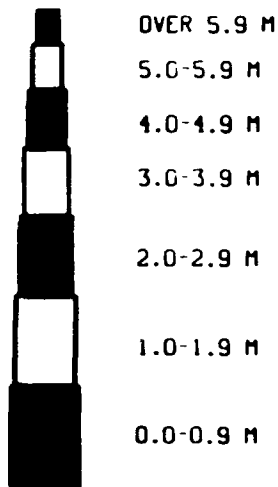
HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
1000	1018	.	.	.	.	.	.	.	.	.	.	.	1018
900	128	.	.	.	.	.	.	.	.	.	.	.	128
800	.	.	.	.	.	.	.	.	.	.	.	.	.
700	.	.	.	.	.	.	.	.	.	.	.	.	.
600	.	.	.	.	.	.	.	.	.	.	.	.	.
500	.	.	.	.	.	.	.	.	.	.	.	.	.
400	.	.	.	.	.	.	.	.	.	.	.	.	.
300	.	.	.	.	.	.	.	.	.	.	.	.	.
200	.	.	.	.	.	.	.	.	.	.	.	.	.
100	.	.	.	.	.	.	.	.	.	.	.	.	.
0	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	1146	0	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.3		LARGEST HS(M) = 0.7		MEAN TP(SEC) = 2.5		NO. OF CASES = 670.							

STATION 14 33.67N 118.12W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	633	75	470	625	263	153	35	108	..	..	..	2262
1.0-1.9	219	80	1217	770	130	82	24	70	..	..	..	4427
2.0-2.9	6	19	259	387	174	107	33	0	..	..	..	2108
3.0-3.9	..	2	15	85	81	11	2	0	..	..	..	2069
4.0-4.9	8	21	3	..	0	..	..	..	1000
5.0-5.9	0	..	..	..	0
6.0-6.9	0	..	..	..	0
7.0-7.9	0	..	..	..	0
8.0-8.9	0	..	..	..	0
9.0-9.9	0	..	..	..	0
10.0-10.9	0	..	..	..	0
11.0-11.9	0	..	..	..	0
12.0-12.9	0	..	..	..	0
13.0-13.9	0	..	..	..	0
14.0-14.9	0	..	..	..	0
15.0-15.9	0	..	..	..	0
16.0-16.9	0	..	..	..	0
17.0-17.9	0	..	..	..	0
18.0-18.9	0	..	..	..	0
19.0-19.9	0	..	..	..	0
20.0-20.9	0	..	..	..	0
21.0-21.9	0	..	..	..	0
22.0-22.9	0	..	..	..	0
23.0-23.9	0	..	..	..	0
24.0-24.9	0	..	..	..	0
25.0-25.9	0	..	..	..	0
26.0-26.9	0	..	..	..	0
27.0-27.9	0	..	..	..	0
28.0-28.9	0	..	..	..	0
29.0-29.9	0	..	..	..	0
30.0-30.9	0	..	..	..	0
31.0-31.9	0	..	..	..	0
32.0-32.9	0	..	..	..	0
33.0-33.9	0	..	..	..	0
34.0-34.9	0	..	..	..	0
35.0-35.9	0	..	..	..	0
36.0-36.9	0	..	..	..	0
37.0-37.9	0	..	..	..	0
38.0-38.9	0	..	..	..	0
39.0-39.9	0	..	..	..	0
40.0-40.9	0	..	..	..	0
41.0-41.9	0	..	..	..	0
42.0-42.9	0	..	..	..	0
43.0-43.9	0	..	..	..	0
44.0-44.9	0	..	..	..	0
45.0-45.9	0	..	..	..	0
46.0-46.9	0	..	..	..	0
47.0-47.9	0	..	..	..	0
48.0-48.9	0	..	..	..	0
49.0-49.9	0	..	..	..	0
50.0-50.9	0	..	..	..	0
51.0-51.9	0	..	..	..	0
52.0-52.9	0	..	..	..	0
53.0-53.9	0	..	..	..	0
54.0-54.9	0	..	..	..	0
55.0-55.9	0	..	..	..	0
56.0-56.9	0	..	..	..	0
57.0-57.9	0	..	..	..	0
58.0-58.9	0	..	..	..	0
59.0-59.9	0	..	..	..	0
60.0-60.9	0	..	..	..	0
61.0-61.9	0	..	..	..	0
62.0-62.9	0	..	..	..	0
63.0-63.9	0	..	..	..	0
64.0-64.9	0	..	..	..	0
65.0-65.9	0	..	..	..	0
66.0-66.9	0	..	..	..	0
67.0-67.9	0	..	..	..	0
68.0-68.9	0	..	..	..	0
69.0-69.9	0	..	..	..	0
70.0-70.9	0	..	..	..	0
71.0-71.9	0	..	..	..	0
72.0-72.9	0	..	..	..	0
73.0-73.9	0	..	..	..	0
74.0-74.9	0	..	..	..	0
75.0-75.9	0	..	..	..	0
76.0-76.9	0	..	..	..	0
77.0-77.9	0	..	..	..	0
78.0-78.9	0	..	..	..	0
79.0-79.9	0	..	..	..	0
80.0-80.9	0	..	..	..	0
81.0-81.9	0	..	..	..	0
82.0-82.9	0	..	..	..	0
83.0-83.9	0	..	..	..	0
84.0-84.9	0	..	..	..	0
85.0-85.9	0	..	..	..	0
86.0-86.9	0	..	..	..	0
87.0-87.9	0	..	..	..	0
88.0-88.9	0	..	..	..	0
89.0-89.9	0	..	..	..	0
90.0-90.9	0	..	..	..	0
91.0-91.9	0	..	..	..	0
92.0-92.9	0	..	..	..	0
93.0-93.9	0	..	..	..	0
94.0-94.9	0	..	..	..	0
95.0-95.9	0	..	..	..	0
96.0-96.9	0	..	..	..	0
97.0-97.9	0	..	..	..	0
98.0-98.9	0	..	..	..	0
99.0-99.9	0	..	..	..	0
TOTAL	858	176	1961	1875	1179	1500	1437	813	173	0	0	58440

MEAN HS(M) = 0.8 LARGEST HS(M) = 3.5 MEAN TP(SEC) = 9.5 TOTAL CASES = 58440.

STATION 14
33.67N, 118.12W
58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 14 (33.67N 118.12W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1957	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1958	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1959	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1960	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1961	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1962	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1963	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1964	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1965	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1966	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1967	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1968	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1969	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1970	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1971	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1972	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1973	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1974	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1975	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
MEAN	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 14 (33.67N 118.12W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1957	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1958	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1959	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1960	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1961	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1962	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1963	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1964	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1965	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1966	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1967	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1968	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1969	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1970	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1971	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1972	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1973	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1974	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8
1975	1.2	1.3	1.1	0.9	0.8	0.7	0.5	0.5	0.5	0.7	0.9	1.3	0.8

20 YR. STATISTICS FOR WIS STATION 14 (33.67N 118.12W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.8
MEAN PEAK WAVE PERIOD (SECONDS) =	9.5
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.5
STANDARD DEVIATION OF TP (SECONDS) =	3.2
LARGEST HS (METERS) =	3.5
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	262.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121318

[illegible][illegible][illegible][illegible]

STATION 15 33.67N 118.32W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	148	148
0.5	162	162
1.0	15	15
1.5	1	3	4
2.0	0
2.5	0
3.0	0
3.5	0
4.0	0
4.5	0
5.0	0
5.5	0
6.0	0
6.5	0
7.0	0
7.5	0
8.0	0
8.5	0
9.0	0
9.5	0
10.0	0
10.5	0
11.0	0
11.5	0
12.0	0
12.5	0
13.0	0
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14.5	0
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16.5	0
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17.5	0
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20.5	0
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21.5	0
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22.5	0
23.0	0
23.5	0
24.0	0
24.5	0
25.0	0
25.5	0
26.0	0
26.5	0
27.0	0
27.5	0
28.0	0
28.5	0
29.0	0
29.5	0
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31.5	0
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32.5	0
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33.5	0
34.0	0
34.5	0
35.0	0
35.5	0
36.0	0
36.5	0
37.0	0
37.5	0
38.0	0
38.5	0
39.0	0
39.5	0
40.0	0
40.5	0
41.0	0
41.5	0
42.0	0
42.5	0
43.0	0
43.5	0
44.0	0
44.5	0
45.0	0
45.5	0
46.0	0
46.5	0
47.0	0
47.5	0
48.0	0
48.5	0
49.0	0
49.5	0
50.0	0
50.5	0
51.0	0
51.5	0
52.0	0
52.5	0
53.0	0
53.5	0
54.0	0
54.5	0
55.0	0
55.5	0
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57.5	0
58.0	0
58.5	0
59.0	0
59.5	0
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60.5	0
61.0	0
61.5	0
62.0	0
62.5	0
63.0	0
63.5	0
64.0	0
64.5	0
65.0	0
65.5	0
66.0	0
66.5	0
67.0	0
67.5	0
68.0	0
68.5	0
69.0	0
69.5	0
70.0	0
70.5	0
71.0	0
71.5	0
72.0	0
72.5	0
73.0	0
73.5	0
74.0	0
74.5	0
75.0	0
75.5	0
76.0	0
76.5	0
77.0	0
77.5	0
78.0	0
78.5	0
79.0	0
79.5	0
80.0	0
80.5	0
81.0	0
81.5	0
82.0	0
82.5	0
83.0	0
83.5	0
84.0	0
84.5	0
85.0	0
85.5	0
86.0	0
86.5	0
87.0	0
87.5	0
88.0	0
88.5	0
89.0	0
89.5	0
90.0	0
90.5	0
91.0	0
91.5	0
92.0</							

TOTAL

	666666666666
	969696969696
001-4227777+	
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001-4227777+	
TOTAL	

[illegible]

35
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23
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MEAN HS(M) = 0.9 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 4.9 NO. OF CASES = 53.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
25 1	.	10 5	30 3	1	.	.	.	.	.	.
1	20 5	8 1	3 6	5	6 1	1	1	.	.	.
.	.	.	.	.	1	.	.	.	.	.
.
.
26	25	24	42	6	7	1	2	0	0	0

65
1441

MEAN HS(M) = 0.8 LARGEST HS(M) = 1.9 MEAN TP(SEC) = 6.8 NO. OF CASES = 84.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
39	.	10	34	10	1	.	.	.	.	.
3	6	5	13	11	13	6	5	.	.	.
.	6	3	.	1	11	10	1	3	.	.
.	.	.	.	.	.	1	.	1	.	.
.
.
42	12	19	55	22	15	17	6	4	0	0

MM625-100000
00251

MEAN HS(M) = 0.9 LARGEST HS(M) = 2.7 MEAN TP(SEC) = 7.9 NO. OF CASES = 120.

TOTAL

TOTAL

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
61	3	54	41		13	.	.	.	.	.
1	16	32	100	61	23	.	.	.	.	.
.	13	10	20	49	27	35	3	.	.	.
.	5	5	8	20	27	46	1	.	.	.
.	.	.	1	1	13	13	11	3	.	.
.
.
.
62	27	101	170	131	103	94	15	3	0	0

172
125
112
111

MEAN HS(M) = 0.9 LARGEST HS(M) = 2.6 MEAN TP(SEC) = 9.0 NO. OF CASES = 423.

STATION 15 33.67N 118.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	92	595	3680	5130	1635	699	172	29		3		12035
0.1	49	807	10145	8894	6528	7195	3685	501	30	1		37835
0.2	5	441	5470	4170	2891	5174	5713	2056	177	1		26100
0.3		49	937	2044	1069	1955	3714	2422	343			12533
0.4			44	361	451	436	936	994	272			3494
0.5			5	22	58	82	294	284	94			840
0.6					1	6	58	80	27			177
0.7								5	3			8
0.8												0
0.9												0
1.0												0
TOTAL	146	1892	20287	20621	12633	15547	14572	6373	946	5	0	
MEAN HS(M) =	1.0	LARGEST HS(M) =	3.5	MEAN TP(SEC) =	9.9	NO. OF CASES =	54379.					

STATION 15 33.67N 118.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	207	53	1	1	3	1						209
0.1	167	321	106	109	32	8						308
0.2	23	66	54	1	1							592
0.3		3	6									131
0.4			1									10
0.5												1
0.6												0
0.7												0
0.8												0
0.9												0
1.0												0
TOTAL	397	443	199	166	36	10	1	0	0	0	0	
MEAN HS(M) =	1.0	LARGEST HS(M) =	3.0	MEAN TP(SEC) =	5.4	NO. OF CASES =	741.					

STATION 15 33.67N 118.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	343											343
0.1	571	15										576
0.2	25											40
0.3												0
0.4												0
0.5												0
0.6												0
0.7												0
0.8												0
0.9												0
1.0												0
TOTAL	939	20	0	0	0	0	0	0	0	0	0	
MEAN HS(M) =	0.5	LARGEST HS(M) =	1.3	MEAN TP(SEC) =	3.2	NO. OF CASES =	562.					

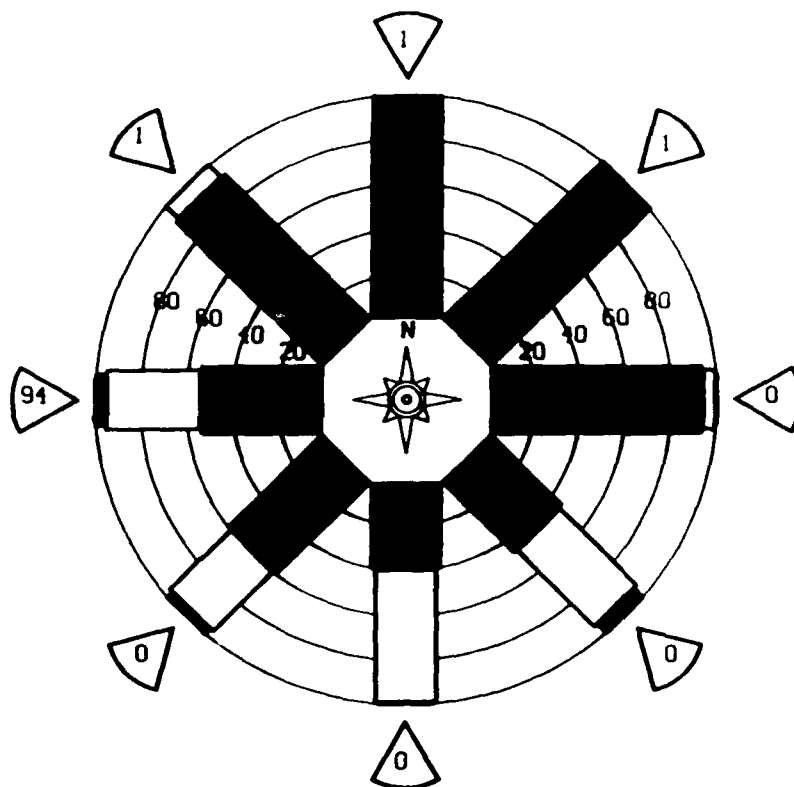
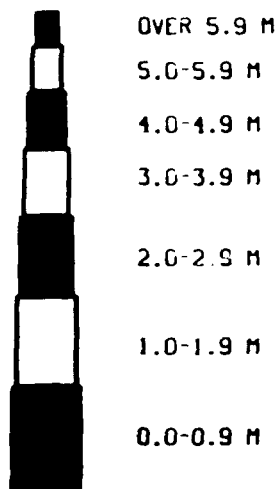
STATION 15 33.67N 118.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	388											388
0.1	342											342
0.2												0
0.3												0
0.4												0
0.5												0
0.6												0
0.7												0
0.8												0
0.9												0
1.0												0
TOTAL	730	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) =	0.4	LARGEST HS(M) =	0.7	MEAN TP(SEC) =	2.9	NO. OF CASES =	427.					

STATION 15 33.67N 118.32W FOR ALL DIRECTIONS												TOTAL	
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS													
HEIGHT(METERS)	PERIOD(SECONDS)												
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER		
0.0-0.9	319	59	375	523	163	71	17	2	3	.	.	1529	
1.0-1.9	180	87	1021	906	660	722	368	50	13	.	.	3997	
2.0-2.9	8	15	160	432	299	521	377	22	17	.	.	2703	
3.0-3.9	.	1	102	207	109	200	255	100	23	.	.	1290	
4.0-4.9	.	.	5	36	45	8	5	8	2	.	.	354	
5.0-5.9	.	.	.	2	5	.	.	8	.	.	.	81	
6.0-6.9	15	
7.0-7.9	0	
8.0-8.9	0	
9.0-9.9	0	
10.0-10.9	0	
11.0-11.9	0	
12.0-12.9	0	
13.0-13.9	0	
14.0-14.9	0	
15.0-15.9	0	
16.0-16.9	0	
17.0-17.9	0	
18.0-18.9	0	
19.0-19.9	0	
20.0-20.9	0	
21.0-21.9	0	
22.0-22.9	0	
23.0-23.9	0	
24.0-24.9	0	
25.0-25.9	0	
26.0-26.9	0	
27.0-27.9	0	
28.0-28.9	0	
29.0-29.9	0	
30.0-30.9	0	
31.0-31.9	0	
32.0-32.9	0	
33.0-33.9	0	
34.0-34.9	0	
35.0-35.9	0	
36.0-36.9	0	
37.0-37.9	0	
38.0-38.9	0	
39.0-39.9	0	
40.0-40.9	0	
41.0-41.9	0	
42.0-42.9	0	
43.0-43.9	0	
44.0-44.9	0	
45.0-45.9	0	
46.0-46.9	0	
47.0-47.9	0	
48.0-48.9	0	
49.0-49.9	0	
50.0-50.9	0	
51.0-51.9	0	
52.0-52.9	0	
53.0-53.9	0	
54.0-54.9	0	
55.0-55.9	0	
56.0-56.9	0	
57.0-57.9	0	
58.0-58.9	0	
59.0-59.9	0	
60.0-60.9	0	
61.0-61.9	0	
62.0-62.9	0	
63.0-63.9	0	
64.0-64.9	0	
65.0-65.9	0	
66.0-66.9	0	
67.0-67.9	0	
68.0-68.9	0	
69.0-69.9	0	
70.0-70.9	0	
71.0-71.9	0	
72.0-72.9	0	
73.0-73.9	0	
74.0-74.9	0	
75.0-75.9	0	
76.0-76.9	0	
77.0-77.9	0	
78.0-78.9	0	
79.0-79.9	0	
80.0-80.9	0	
81.0-81.9	0	
82.0-82.9	0	
83.0-83.9	0	
84.0-84.9	0	
85.0-85.9	0	
86.0-86.9	0	
87.0-87.9	0	
88.0-88.9	0	
89.0-89.9	0	
90.0-90.9	0	
91.0-91.9	0	
92.0-92.9	0	
93.0-93.9	0	
94.0-94.9	0	
95.0-95.9	0	
96.0-96.9	0	
97.0-97.9	0	
98.0-98.9	0	
99.0-99.9	0	
TOTAL	507	251	2063	2106	1281	1567	1466	636	92	0	0	58440	
MEAN HS(M) = 1.0 LARGEST HS(M) = 3.5 MEAN TP(SEC) = 9.5 TOTAL CASES = 58440.													

MEAN HS(M) = 1.0 LARGEST HS(M) = 3.5 MEAN TP(SEC) = 9.5 TOTAL CASES = 58440.

STATION 15
33.67N, 118.32W
58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 15 (33.67N 118.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.4	1.1	0.9	1.0	0.9	0.9	0.6	0.8	0.4	0.6	0.8	1.0	0.9
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.3	1.4	1.2	1.1	1.0	0.9	0.7	0.6	0.6	0.7	1.0	1.4	

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 15 (33.67N 118.32W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.7	1.7	2.4	2.4	1.7	1.6	1.2	1.6	1.1	2.0	1.6	2.1	
1957	2.1	3.3	2.2	2.2	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1958	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1959	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1960	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1961	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1962	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1963	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1964	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1965	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1966	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1967	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1968	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1969	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1970	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1971	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1972	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1973	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1974	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1975	2.1	2.1	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	

20 YR. STATISTICS FOR WIS STATION 15 (33.67N 118.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 1.0
 MEAN PEAK WAVE PERIOD (SECONDS) = 9.5
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.5
 STANDARD DEVIATION OF TP (SECONDS) = 2.8
 LARGEST HS (METERS) = 3.5
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 16.7
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 268.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 69121318

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
10.0	0	292	.	.	.	.	.	.	.	.	.	.	292
9.5	0	311	.	.	.	.	.	.	.	.	.	.	311
9.0	1	.	1	.	.	.	.	.	.	.	.	.	2
8.5	1	.	.	.	.	.	.	.	.	.	.	.	0
8.0	1	.	.	.	.	.	.	.	.	.	.	.	0
7.5	1	.	.	.	.	.	.	.	.	.	.	.	0
7.0	1	.	.	.	.	.	.	.	.	.	.	.	0
6.5	1	.	.	.	.	.	.	.	.	.	.	.	0
6.0	1	.	.	.	.	.	.	.	.	.	.	.	0
5.5	1	.	.	.	.	.	.	.	.	.	.	.	0
5.0	1	.	.	.	.	.	.	.	.	.	.	.	0
4.5	1	.	.	.	.	.	.	.	.	.	.	.	0
4.0	1	.	.	.	.	.	.	.	.	.	.	.	0
3.5	1	.	.	.	.	.	.	.	.	.	.	.	0
3.0	1	.	.	.	.	.	.	.	.	.	.	.	0
2.5	1	.	.	.	.	.	.	.	.	.	.	.	0
2.0	1	.	.	.	.	.	.	.	.	.	.	.	0
1.5	1	.	.	.	.	.	.	.	.	.	.	.	0
1.0	1	.	.	.	.	.	.	.	.	.	.	.	0
0.5	1	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		604	1	0	0	0	0	0	0	0	0		
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.1		MEAN TP(SEC) = 3.1		NO. OF CASES = 355.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	256	.	.	.	.	.	.	.	.	.	256
0.50	0.99	121	.	.	.	.	.	.	.	.	.	121
1.00	1.49	.	.	.	.	.	.	.	.	.	.	0
1.50	1.99	.	.	.	.	.	.	.	.	.	.	0
2.00	2.49	.	.	.	.	.	.	.	.	.	.	0
2.50	2.99	.	.	.	.	.	.	.	.	.	.	0
3.00	3.49	.	.	.	.	.	.	.	.	.	.	0
3.50	3.99	.	.	.	.	.	.	.	.	.	.	0
4.00	4.49	.	.	.	.	.	.	.	.	.	.	0
4.50	4.99	.	.	.	.	.	.	.	.	.	.	0
5.00	5.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL		377	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.4		LARGEST HS(M) = 0.7		MEAN TP(SEC) = 2.7		NO. OF CASES = 221.							

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	-	367	.	.	.	.	.	.	.	.	.	.	367
.50	-	97	.	.	.	.	.	.	.	.	.	.	97
1.00	-	.	1	.	.	.	.	.	.	.	.	.	1
1.50	-	.	.	.	.	.	.	.	.	.	.	.	.
2.00	-	.	.	.	.	.	.	.	.	.	.	.	.
2.50	-	.	.	.	.	.	.	.	.	.	.	.	.
3.00	-	.	.	.	.	.	.	.	.	.	.	.	.
3.50	-	.	.	.	.	.	.	.	.	.	.	.	.
4.00	-	.	.	.	.	.	.	.	.	.	.	.	.
4.50	-	.	.	.	.	.	.	.	.	.	.	.	.
5.00	-	.	.	.	.	.	.	.	.	.	.	.	.
5.50	-	.	.	.	.	.	.	.	.	.	.	.	.
6.00	-	.	.	.	.	.	.	.	.	.	.	.	.
6.50	-	.	.	.	.	.	.	.	.	.	.	.	.
7.00	-	.	.	.	.	.	.	.	.	.	.	.	.
7.50	-	.	.	.	.	.	.	.	.	.	.	.	.
8.00	-	.	.	.	.	.	.	.	.	.	.	.	.
8.50	-	.	.	.	.	.	.	.	.	.	.	.	.
9.00	-	.	.	.	.	.	.	.	.	.	.	.	.
9.50	-	.	.	.	.	.	.	.	.	.	.	.	.
10.00+	-	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL		464	1	0	0	0	0	0	0	0	0	0	
MEAN HS(M) =	0.3	LARGEST HS(M) =	1.3	MEAN TP(SEC) =	2.5	NO. OF CASES =	273.						

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.49	0	215	.	.	.	.	.	.	.	.	.	.	215
0.50	1	164	.	.	.	.	.	.	.	.	.	.	164
0.51	2	6	.	.	.	.	.	.	.	.	.	.	6
0.52	3	.	.	.	.	.	.	.	.	.	.	.	.
0.53	4	.	.	.	.	.	.	.	.	.	.	.	.
0.54	5	.	.	.	.	.	.	.	.	.	.	.	.
0.55	6	.	.	.	.	.	.	.	.	.	.	.	.
0.56	7	.	.	.	.	.	.	.	.	.	.	.	.
0.57	8	.	.	.	.	.	.	.	.	.	.	.	.
0.58	9	.	.	.	.	.	.	.	.	.	.	.	.
0.59	10	.	.	.	.	.	.	.	.	.	.	.	.
0.60	11	.	.	.	.	.	.	.	.	.	.	.	.
0.61	12	.	.	.	.	.	.	.	.	.	.	.	.
0.62	13	.	.	.	.	.	.	.	.	.	.	.	.
0.63	14	.	.	.	.	.	.	.	.	.	.	.	.
0.64	15	.	.	.	.	.	.	.	.	.	.	.	.
0.65	16	.	.	.	.	.	.	.	.	.	.	.	.
0.66	17	.	.	.	.	.	.	.	.	.	.	.	.
0.67	18	.	.	.	.	.	.	.	.	.	.	.	.
0.68	19	.	.	.	.	.	.	.	.	.	.	.	.
0.69	20	.	.	.	.	.	.	.	.	.	.	.	.
0.70	21	.	.	.	.	.	.	.	.	.	.	.	.
0.71	22	.	.	.	.	.	.	.	.	.	.	.	.
0.72	23	.	.	.	.	.	.	.	.	.	.	.	.
0.73	24	.	.	.	.	.	.	.	.	.	.	.	.
0.74	25	.	.	.	.	.	.	.	.	.	.	.	.
0.75	26	.	.	.	.	.	.	.	.	.	.	.	.
0.76	27	.	.	.	.	.	.	.	.	.	.	.	.
0.77	28	.	.	.	.	.	.	.	.	.	.	.	.
0.78	29	.	.	.	.	.	.	.	.	.	.	.	.
0.79	30	.	.	.	.	.	.	.	.	.	.	.	.
0.80	31	.	.	.	.	.	.	.	.	.	.	.	.
0.81	32	.	.	.	.	.	.	.	.	.	.	.	.
0.82	33	.	.	.	.	.	.	.	.	.	.	.	.
0.83	34	.	.	.	.	.	.	.	.	.	.	.	.
0.84	35	.	.	.	.	.	.	.	.	.	.	.	.
0.85	36	.	.	.	.	.	.	.	.	.	.	.	.
0.86	37	.	.	.	.	.	.	.	.	.	.	.	.
0.87	38	.	.	.	.	.	.	.	.	.	.	.	.
0.88	39	.	.	.	.	.	.	.	.	.	.	.	.
0.89	40	.	.	.	.	.	.	.	.	.	.	.	.
0.90	41	.	.	.	.	.	.	.	.	.	.	.	.
0.91	42	.	.	.	.	.	.	.	.	.	.	.	.
0.92	43	.	.	.	.	.	.	.	.	.	.	.	.
0.93	44	.	.	.	.	.	.	.	.	.	.	.	.
0.94	45	.	.	.</									

STATION 16 33.67N 118.52W AZIMUTH(DEGREES) = 90.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.50	71	71
1.00	83	83
1.50	.	5	5
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00
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35.50
36.00
36.50
37.00
37.50
38.00
38.50
39.00
39.50
40.00
40.50
41.00
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94.00	.	.	.</									

STATION 16 33.67N 118.52W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	11	11
0.5	.	10	.	5	1	3	10
1.0	.	3	1	.	.	1	17
1.5	0
2.0	0
2.5	0
3.0	0
3.5	0
4.0	0
4.5	0
5.0	0
5.5	0
6.0	0
6.5	0
7.0	0
7.5	0
8.0	0
8.5	0
9.0	0
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86.5	0
87.0	0
87.5	0
88.0	0
88.5	0
89.0	0
89.5	0
90.0	0
90.5	0
91.0	0
91.5	0
92.0</								

HEIGHT(METERS)	PERIOD(SECONDS)												TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	107	485	2515	3774	1040	446	95	23		1	.	8486	
0.5	37	425	8374	8362	5835	6139	2636	347			.	28687	
1.0	3	422	7171	3434	3095	728	4573	1255	22		.	14238	
1.5		25	1635	2784	920	103	5655	16559	260		.	38094	
2.0		1	99	706	610	686	1408	1440	289		.	1340	
2.5			8	87	145	131	426	410	444		.	420	
3.0			1	1	11	42	135	183	47		.	65	
3.5							10		8		.	0	
4.0											.	0	
4.5											.	0	
5.0											.	0	
TOTAL	147	1858	19803	19148	11659	15275	15010	6668	833	2	0		
MEAN HS(M) =	1.1	LARGEST HS(M) =	3.7	MEAN TP(SEC) =	10.0	NO. OF CASES =	52852						

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.00	-	142		53	148	56	6						405	
0.50	-	126	111	266	716	220	29						1474	
1.00	-	13	379	340	338	282	147	6					1514	
1.50	-		42	99	11	13	35	11					211	
2.00	-			11	1								12	
2.50	-			1									0	
3.00	-												0	
3.50	-												0	
4.00	-												0	
4.50	-												0	
5.00+	-												0	
TOTAL		281	532	770	1215	571	217	32	0	0	0	0		
MEAN HS(M) = 0.9		LARGEST HS(M) = 2.7		MEAN TP(SEC) = 7.8		NO. OF CASES = 2125.								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	-	278	.	.	.	.	.	.	.	.	.	.	278
0.50	-	492	3	.	.	.	.	.	.	.	.	.	495
1.00	-	22	42	.	.	.	.	.	.	.	.	.	64
1.50	-	.	.	.	.	.	.	.	.	.	.	.	0
2.00	-	.	.	.	.	.	.	.	.	.	.	.	0
2.50	-	.	.	.	.	.	.	.	.	.	.	.	0
3.00	-	.	.	.	.	.	.	.	.	.	.	.	0
3.50	-	.	.	.	.	.	.	.	.	.	.	.	0
4.00	-	.	.	.	.	.	.	.	.	.	.	.	0
4.50	-	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	-	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		792	45	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.6		LARGEST HS(M) = 1.4		MEAN TP(SEC) = 3.4		NO. OF CASES = 491.							

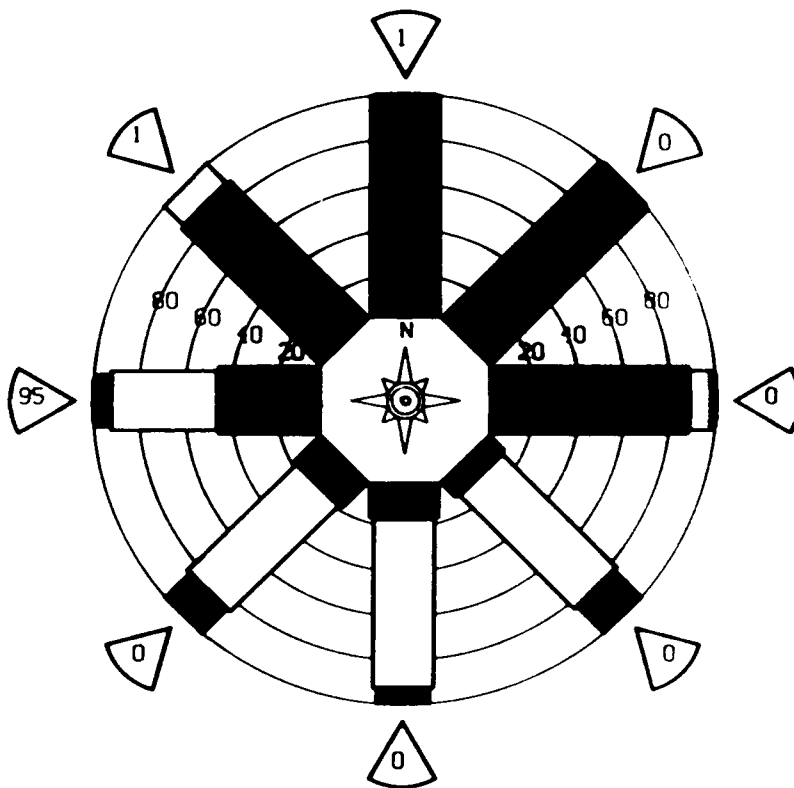
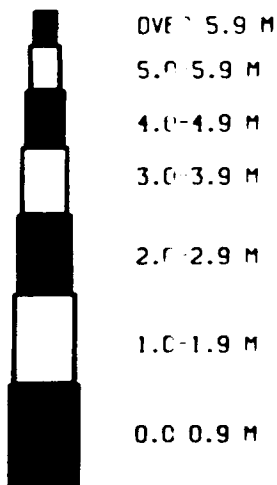
HEIGHT (METERS)		PERIOD (SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	237	.	.	.	.	.	.	.	.	.	.	237
0.1	0.99	480	.	.	.	.	.	.	.	.	.	.	480
0.2	1.49	5	1	.	.	.	.	.	.	.	.	.	6
0.3	1.99	.	.	.	.	.	.	.	.	.	.	.	1
0.4	2.49	.	.	.	.	.	.	.	.	.	.	.	0
0.5	2.99	.	.	.	.	.	.	.	.	.	.	.	0
0.6	3.49	.	.	.	.	.	.	.	.	.	.	.	0
0.7	3.99	.	.	.	.	.	.	.	.	.	.	.	0
0.8	4.49	.	.	.	.	.	.	.	.	.	.	.	0
0.9	4.99	.	.	.	.	.	.	.	.	.	.	.	0
1.0	5.49	.	.	.	.	.	.	.	.	.	.	.	0
1.1	5.99	.	.	.	.	.	.	.	.	.	.	.	0
1.2	6.49	.	.	.	.	.	.	.	.	.	.	.	0
1.3	6.99	.	.	.	.	.	.	.	.	.	.	.	0
1.4	7.49	.	.	.	.	.	.	.	.	.	.	.	0
1.5	7.99	.	.	.	.	.	.	.	.	.	.	.	0
1.6	8.49	.	.	.	.	.	.	.	.	.	.	.	0
1.7	8.99	.	.	.	.	.	.	.	.	.	.	.	0
1.8	9.49	.	.	.	.	.	.	.	.	.	.	.	0
1.9	9.99	.	.	.	.	.	.	.	.	.	.	.	0
2.0	10.49	.	.	.	.	.	.	.	.	.	.	.	0
2.1	10.99	.	.	.	.	.	.	.	.	.	.	.	0
2.2	11.49	.	.	.	.	.	.	.	.	.	.	.	0
2.3	11.99	.	.	.	.	.	.	.	.	.	.	.	0
2.4	12.49	.	.	.	.	.	.	.	.	.	.	.	0
2.5	12.99	.	.	.	.	.	.	.	.	.	.	.	0
2.6	13.49	.	.	.	.	.	.	.	.	.	.	.	0
2.7	13.99	.	.	.	.	.	.	.	.	.	.	.	0
2.8	14.49	.	.	.	.	.	.	.	.	.	.	.	0
2.9	14.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0	15.49	.	.	.	.	.	.	.	.	.	.	.	0
3.1	15.99	.	.	.	.	.	.	.	.	.	.	.	0
3.2	16.49	.	.	.	.	.	.	.	.	.	.	.	0
3.3	16.99	.	.	.	.	.	.	.	.	.	.	.	0
3.4	17.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5	17.99	.	.	.	.	.	.	.	.	.	.	.	0
3.6	18.49	.	.	.	.	.	.	.	.	.	.	.	0
3.7	18.99	.	.	.	.	.	.	.	.	.	.	.	0
3.8	19.49	.	.	.	.	.	.	.	.	.	.	.	0
3.9	19.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0	20.49	.	.	.	.	.	.	.	.	.	.	.	0
4.1	20.99	.	.	.	.	.	.	.	.	.	.	.	0
4.2	21.49	.	.	.	.	.	.	.	.	.	.	.	0
4.3	21.99								

STATION 16 33.67N 118.52W FOR ALL DIRECTIONS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)												TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3	LONGER	
10.0-11.0	207	50	259	395	109	45	9	2	2	0	0	0	1076
9.0-10.0	192	107	866	914	808	206	264	32	2	0	0	0	1000
8.0-9.0	5	95	764	339	150	184	278	14	2	0	0	0	1000
7.0-8.0	0	14	189	299	109	244	467	14	2	0	0	0	1000
6.0-7.0	0	0	152	80	207	16	146	20	2	0	0	0	1000
5.0-6.0	0	0	0	12	1	4	1	4	0	0	0	0	1000
4.0-5.0	0	0	0	0	0	0	0	0	0	0	0	0	1000
3.0-4.0	0	0	0	0	0	0	0	0	0	0	0	0	1000
2.0-3.0	0	0	0	0	0	0	0	0	0	0	0	0	1000
1.0-2.0	0	0	0	0	0	0	0	0	0	0	0	0	1000
0.0-1.0	0	0	0	0	0	0	0	0	0	0	0	0	1000
TOTAL	404	266	2095	2094	1264	1574	1526	669	80	0	0	0	58440

MEAN HS(M) = 1.1 LARGEST HS(M) = 3.7 MEAN TP(SEC) = 9.6 TOTAL CASES = 58440.

STATION 16
33.67N, 118.52W
58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 16 (33.67N 118.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1957	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1958	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1959	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1960	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1961	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1962	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1963	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1964	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1965	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1966	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1967	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1968	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1969	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1970	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1971	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1972	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1973	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1974	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1975	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
MEAN	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 16 (33.67N 118.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1957	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1958	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1959	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1960	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1961	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1962	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1963	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1964	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1965	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1966	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1967	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1968	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1969	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1970	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1971	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1972	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1973	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1974	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0
1975	1.5	1.5	1.3	1.2	1.1	1.0	0.8	0.6	0.7	0.8	1.1	1.5	1.0

20 YR. STATISTICS FOR WIS STATION 16 (33.67N 118.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 1.1
 MEAN PEAK WAVE PERIOD (SECONDS) = 9.6
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.6
 STANDARD DEVIATION OF TP (SECONDS) = 2.7
 LARGEST HS (METERS) = 3.7
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 16.7
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 270.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 69121318

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	439	.	.	.	.	.	.	.	.	.	.	.	439	
0.1	188	.	.	.	.	.	.	.	.	.	.	.	188	
0.2	1	.	.	.	.	.	.	.	.	.	.	.	1	
0.3	.	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	628	0	0	0	0	0	0	0	0	0	0	0		
MEAN HS(M) = 0.4		LARGEST HS(M) = 1.0		MEAN TP(SEC) = 2.5		NO. OF CASES = 368.								

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
0.0	-	150	.	.	.	.	.	.	.	.	.	.	150
0.5	-	157	.	.	.	.	.	.	.	.	.	.	157
1.0	-	27	.	.	.	.	.	.	.	.	.	.	27
1.5	-	1	.	.	.	.	.	.	.	.	.	.	1
2.0	-	.	.	.	.	.	.	.	.	.	.	.	0
2.5	-	.	.	.	.	.	.	.	.	.	.	.	0
3.0	-	.	.	.	.	.	.	.	.	.	.	.	0
3.5	-	.	.	.	.	.	.	.	.	.	.	.	0
4.0	-	.	.	.	.	.	.	.	.	.	.	.	0
4.5	-	.	.	.	.	.	.	.	.	.	.	.	0
5.0	-	.	.	.	.	.	.	.	.	.	.	.	0
5.5	-	.	.	.	.	.	.	.	.	.	.	.	0
6.0	-	.	.	.	.	.	.	.	.	.	.	.	0
6.5	-	.	.	.	.	.	.	.	.	.	.	.	0
7.0	-	.	.	.	.	.	.	.	.	.	.	.	0
7.5	-	.	.	.	.	.	.	.	.	.	.	.	0
8.0	-	.	.	.	.	.	.	.	.	.	.	.	0
8.5	-	.	.	.	.	.	.	.	.	.	.	.	0
9.0	-	.	.	.	.	.	.	.	.	.	.	.	0
9.5	-	.	.	.	.	.	.	.	.	.	.	.	0
10.0	-	.	.	.	.	.	.	.	.	.	.	.	0
10.5	-	.	.	.	.	.	.	.	.	.	.	.	0
11.0	-	.	.	.	.	.	.	.	.	.	.	.	0
11.5	-	.	.	.	.	.	.	.	.	.	.	.	0
12.0	-	.	.	.	.	.	.	.	.	.	.	.	0
12.5	-	.	.	.	.	.	.	.	.	.	.	.	0
13.0	-	.	.	.	.	.	.	.	.	.	.	.	0
13.5	-	.	.	.	.	.	.	.	.	.	.	.	0
14.0	-	.	.	.	.	.	.	.	.	.	.	.	0
14.5	-	.	.	.	.	.	.	.	.	.	.	.	0
15.0	-	.	.	.	.	.	.	.	.	.	.	.	0
15.5	-	.	.	.	.	.	.	.	.	.	.	.	0
16.0	-	.	.	.	.	.	.	.	.	.	.	.	0
16.5	-	.	.	.	.	.	.	.	.	.	.	.	0
17.0	-	.	.	.	.	.	.	.	.	.	.	.	0
17.5	-	.	.	.	.	.	.	.	.	.	.	.	0
18.0	-	.	.	.	.	.	.	.	.	.	.	.	0
18.5	-	.	.	.	.	.	.	.	.	.	.	.	0
19.0	-	.	.	.	.	.	.	.	.	.	.	.	0
19.5	-	.	.	.	.	.	.	.	.	.	.	.	0
20.0	-	.	.	.	.	.	.	.	.	.	.	.	0
20.5	-	.	.	.	.	.	.	.	.	.	.	.	0
21.0	-	.	.	.	.	.	.	.	.	.	.	.	0
21.5	-	.	.	.	.	.	.	.	.	.	.	.	0
22.0	-	.	.	.	.	.	.	.	.	.	.	.	0
22.5	-							

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL		
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER		
0.0	23	.	.	.	.	.	.	.	.	.	.	23
0.1	3	.	.	.	.	.	.	.	.	.	.	3
0.2	
0.3	
0.4	
0.5	
0.6	
0.7	
0.8	
0.9	
1.0	
1.1	
1.2	
1.3	
1.4	
1.5	
1.6	
1.7	
1.8	
1.9	
2.0	
2.1	
2.2	
2.3	
2.4	
2.5	
2.6	
TOTAL	26	3	0	0	0	0	0	0	0	0	0		
MEAN HS(M) =	0.4		LARGEST HS(M) =		2.2		MEAN TP(SEC) =		2.0		NO. OF CASES =		18.

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.	13	.	.	.	.	.	.	.	.	.	.	.	13
.1	.	.	.	.	.	.	.	.	.	.	.	.	.
.2	.	.	.	.	.	.	.	.	.	.	.	.	.
.3	.	.	.	.	.	.	.	.	.	.	.	.	.
.4	.	.	.	.	.	.	.	.	.	.	.	.	.
.5	.	.	.	.	.	.	.	.	.	.	.	.	.
.6	.	.	.	.	.	.	.	.	.	.	.	.	.
.7	.	.	.	.	.	.	.	.	.	.	.	.	.
.8	.	.	.	.	.	.	.	.	.	.	.	.	.
.9	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	13	13	7	3	0	0	0	0	0	0	0	0	23
MEAN HS(M) = 0.9		LARGEST HS(M) = 1.9		MEAN TP(SEC) = 4.6		NO. OF CASES = 23.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	0	11	.	.	1	1	.	.	.	.	.	.	12
0.1	0	.	.	.	1	1	.	.	.	.	.	.	2
0.2	0	.	3	10	13	10	3	.	1	.	.	.	40
0.3	0	.	6	1	18	6	3	.	.	.	.	.	31
0.4	0	.	.	.	.	1	3	3	.	1	.	.	8
0.5	0	.	.	.	.	.	.	.	.	.	.	.	0
0.6	0	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0	.	.	.	.	.	.	.	.	.	.	.	0
1.0	0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	+	11	9	11	33	18	6	3	1	1	0	0	
MEAN HS(M) = 1.3		LARGEST HS(M) = 2.4		MEAN TP(SEC) = 8.1		NO. OF CASES = 61.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.00	27			17	23	8	.	1	.	.	.	.	67
0.05	3		1	3	10	10	.	.	.	.	.	.	6
0.10	.		1	15	44	42	25	6	.	.	.	.	163
0.15	.			8	27	11	6	5	.	.	.	.	7
0.20	.			.	15	3	8	6	.	1	.	.	3
0.25	.			.	8	.	.	.	.	.	.	.	8
0.30	.			.	.	.	.	.	.	.	.	.	0
0.35	.			.	.	.	.	.	.	.	.	.	0
0.40	.			.	.	.	.	.	.	.	.	.	0
0.45	.			.	.	.	.	.	.	.	.	.	0
0.50	.			.	.	.	.	.	.	.	.	.	0
0.55	.			.	.	.	.	.	.	.	.	.	0
0.60	.			.	.	.	.	.	.	.	.	.	0
0.65	.			.	.	.	.	.	.	.	.	.	0
0.70	.			.	.	.	.	.	.	.	.	.	0
0.75	.			.	.	.	.	.	.	.	.	.	0
0.80	.			.	.	.	.	.	.	.	.	.	0
0.85	.			.	.	.	.	.	.	.	.	.	0
0.90	.			.	.	.	.	.	.	.	.	.	0
0.95	.			.	.	.	.	.	.	.	.	.	0
1.00	.			.	.	.	.	.	.	.	.	.	0
TOTAL	30	2	43	127	64	39	18	0	1	0	0		
MEAN HS(M) = 1.2	LARGEST HS(M) = 2.6	MEAN TP(SEC) = 8.6	NO. OF CASES = 198.										

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	54	13	35	47	11	10							170
0.1	6	17	106	165	95	70							477
0.2	1	13	186	306	159	159							916
0.3			97	263	162	71							751
0.4			22	126	94	25			5				331
0.5				11	22			11	10				54
0.6													0
0.7													0
0.8													0
0.9													0
1.0													0
TOTAL		61	43	446	918	543	335	293	57	3	0	0	0
MEAN HS(M) = 1.3		LARGEST HS(M) = 2.8		MEAN TP(SEC) = 9.4		NO. OF CASES = 1589.							

STATION 17 33.83N 118.52W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	150	641	3208	4712	1563	756	280	41	5	.	.	11356
0.5-0.99	49	1023	12286	9799	7144	7043	4243	638	44	.	.	42269
1.0-1.49	8	467	7008	4449	2821	5164	5616	1706	49	.	.	27288
1.5-1.99	.	66	1276	2431	968	1339	1967	821	25	.	.	8893
2.0-2.49	.	.	54	436	352	251	453	203	5	.	.	1749
2.5-2.99	.	.	6	35	25	22	44	.	.	.	.	137
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
57.0-57.49	0
57.5-57.99	0
58.0-58.49	0
58.5-58.99	0
59.0-59.49	0
59.5-59.99	0
60.0-60.49	0
60.5-60.99	0
61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
68.0-68.49	0
68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	0
71.5-71.99	0
72.0-72.49	0
72.5-72.99	0
73.0-73.49	0
73.5-73.99	0
74.0-74.49	0
74.5-74.99	0
75.0-75.49	0
75.5-75.99	0
76.0-76.49	0
76.5-76.99	0
77.0-77.49	0
77.5-77.99	0
78.0-78.49	0
78.5-78.99	0
79.0-79.49	0
79.5-79.99	0
80.0-80.49	0
80.5-80.99	0
81.0-81.49	0
81.5-81.99	0
82.0-82.49	0
82.5-82.99	0
83.0-83.49</								

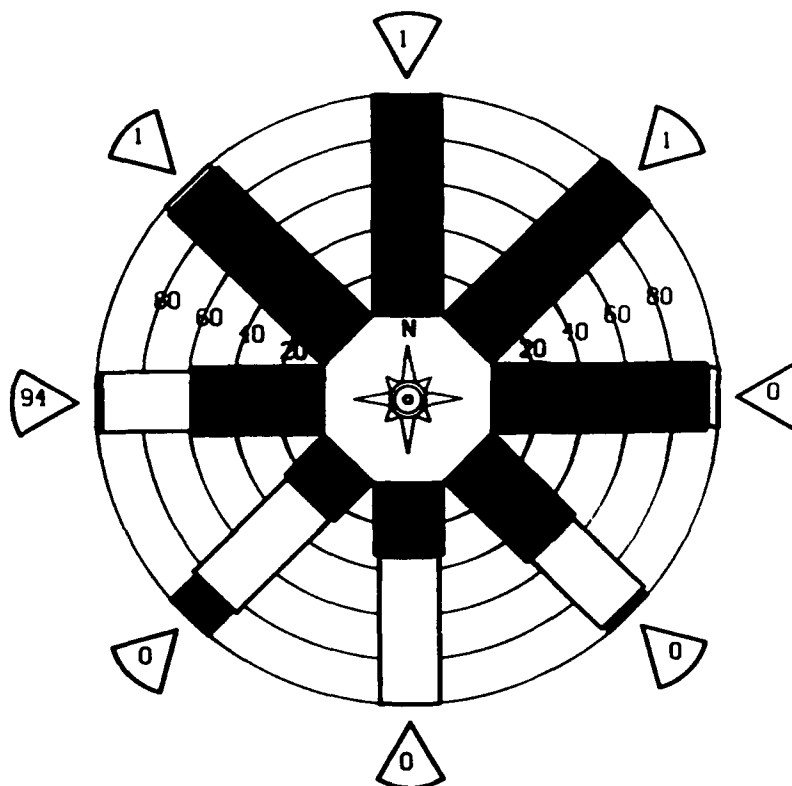
STATION 17 33.83N 118.52W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.9	282	100	326	478	157	76	28	4	..	..	1416
1.0-1.9	232	65	240	99	326	151	426	63	4	..	4503
2.0-2.9	11	..	140	274	114	141	209	171	2	..	2856
3.0-3.9	7	57	42	28	51	85	..	..	973
4.0-4.9	5	4	..	..	21	..	..	209
5.0-5.9	17
6.0-6.9	0
7.0-7.9	0
8.0-8.9	0
9.0-9.9	0
10.0-10.9	0
11.0-11.9	0
12.0-12.9	0
13.0-13.9	0
14.0-14.9	0
15.0-15.9	0
16.0-16.9	0
17.0-17.9	0
18.0-18.9	0
19.0-19.9	0
20.0-20.9	0
21.0-21.9	0
22.0-22.9	0
23.0-23.9	0
24.0-24.9	0
25.0-25.9	0
26.0-26.9	0
27.0-27.9	0
28.0-28.9	0
29.0-29.9	0
30.0-30.9	0
31.0-31.9	0
32.0-32.9	0
33.0-33.9	0
34.0-34.9	0
35.0-35.9	0
36.0-36.9	0
37.0-37.9	0
38.0-38.9	0
39.0-39.9	0
40.0-40.9	0
41.0-41.9	0
42.0-42.9	0
43.0-43.9	0
44.0-44.9	0
45.0-45.9	0
46.0-46.9	0
47.0-47.9	0
48.0-48.9	0
49.0-49.9	0
50.0-50.9	0
51.0-51.9	0
52.0-52.9	0
53.0-53.9	0
54.0-54.9	0
55.0-55.9	0
56.0-56.9	0
57.0-57.9	0
58.0-58.9	0
59.0-59.9	0
60.0-60.9	0
61.0-61.9	0
62.0-62.9	0
63.0-63.9	0
64.0-64.9	0
65.0-65.9	0
66.0-66.9	0
67.0-67.9	0
68.0-68.9	0
69.0-69.9	0
70.0-70.9	0
71.0-71.9	0
72.0-72.9	0
73.0-73.9	0
74.0-74.9	0
75.0-75.9	0
76.0-76.9	0
77.0-77.9	0
78.0-78.9	0
79.0-79.9	0
80.0-80.9	0
81.0-81.9	0
82.0-82.9	0
83.0-83.9	0
84.0-84.9	0
85.0-85.9	0
86.0-86.9	0
87.0-87.9	0
88.0-88.9	0
89.0-89.9	0
90.0-90.9	0
91.0-91.9	0
92.0-92.9	0
93.0-93.9	0
94.0-94.9	0
95.0-95.9	0
96.0-96.9	0
97.0-97.9	0
98.0-98.9	0
99.0-99.9	0
TOTAL	525	233	2438	2292	1348	1493	1290	345	10	0	0

MEAN HS(M) = 0.9 LARGEST HS(M) = 2.9 MEAN TP(SEC) = 9.2 TOTAL CASES = 58440.

STATION 17
33.83N, 118.52W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1957	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1958	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1959	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1960	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1961	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1962	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1963	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1964	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1965	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1966	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1967	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1968	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1969	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1970	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1971	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1972	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1973	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1974	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
1975	1.1	1.2	1.1	1.0	0.9	0.9	0.6	0.7	0.5	0.6	0.7	0.9	0.8
MEAN	1.2	1.2	1.1	1.0	0.9	0.9	0.7	0.6	0.6	0.7	0.9	1.2	

MONTH

[illegible]

20 YR. STATISTICS FOR HIS STATION 17 (33.83N 118.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.9
MEAN PEAK WAVE PERIOD (SECONDS) =	9.2
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	2.6
LARGEST HS (METERS) =	2.9
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	10.0
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	270.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	74033100

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 0.
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	LONGER
0.0	3598	3598
0.5	489	489
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
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86.5
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89.0
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91.5
92.0
92.5
93.0
93.5
94.0
94.5
95.0
95.5
96.0
96.5
97.0
97.5
98.0
98.5
99.0
99.5
100.0
TOTAL	4087	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.8 MEAN TP(SEC) = 2.5 NO

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	
0.0	297	.	.	.	.	.	.	.	.	.	.	.	297
0.1	87	.	.	.	.	.	.	.	.	.	.	.	87
0.2	5	.	.	.	.	.	.	.	.	.	.	.	5
0.3	1	.	.	.	.	.	.	.	.	.	.	.	1
0.4	0	.	.	.	.	.	.	.	.	.	.	.	0
0.5	0	.	.	.	.	.	.	.	.	.	.	.	0
0.6	0	.	.	.	.	.	.	.	.	.	.	.	0
0.7	0	.	.	.	.	.	.	.	.	.	.	.	0
0.8	0	.	.	.	.	.	.	.	.	.	.	.	0
0.9	0	.	.	.	.	.	.	.	.	.	.	.	0
1.0	0	.	.	.	.	.	.	.	.	.	.	.	0
1.1	0	.	.	.	.	.	.	.	.	.	.	.	0
1.2	0	.	.	.	.	.	.	.	.	.	.	.	0
1.3	0	.	.	.	.	.	.	.	.	.	.	.	0
1.4	0	.	.	.	.	.	.	.	.	.	.	.	0
1.5	0	.	.	.	.	.	.	.	.	.	.	.	0
1.6	0	.	.	.	.	.	.	.	.	.	.	.	0
1.7	0	.	.	.	.	.	.	.	.	.	.	.	0
1.8	0	.	.	.	.	.	.	.	.	.	.	.	0
1.9	0	.	.	.	.	.	.	.	.	.	.	.	0
2.0	0	.	.	.	.	.	.	.	.	.	.	.	0
2.1	0	.	.	.	.	.	.	.	.	.	.	.	0
2.2	0	.	.	.	.	.	.	.	.	.	.	.	0
2.3	0	.	.	.	.	.	.	.	.	.	.	.	0
2.4	0	.	.	.	.	.	.	.	.	.	.	.	0
2.5	0	.	.	.	.	.	.	.	.	.	.	.	0
2.6	0	.	.	.	.	.	.	.	.	.	.	.	0
2.7	0	.	.	.	.	.	.	.	.	.	.	.	0
2.8	0	.	.	.	.	.	.	.	.	.	.	.	0
2.9	0	.	.	.	.	.	.	.	.	.	.	.	0
3.0	0	.	.	.	.	.	.	.	.	.	.	.	0
3.1	0	.	.	.	.	.	.	.	.	.	.	.	0
3.2	0	.	.	.	.	.	.	.	.	.	.	.	0
3.3	0	.	.	.	.	.	.	.	.	.	.	.	0
3.4	0	.	.	.	.	.	.	.	.	.	.	.	0
3.5	0	.	.	.	.	.	.	.	.	.	.	.	0
3.6	0	.	.	.	.	.	.	.	.	.	.	.	0
3.7	0	.	.	.	.	.	.	.	.	.	.	.	0
3.8	0	.	.	.	.	.	.	.	.	.	.	.	0
3.9	0	.	.	.	.	.	.	.	.	.	.	.	0
4.0	0	.	.	.	.	.	.	.	.	.	.	.	0
4.1	0	.	.	.	.	.	.	.	.	.	.	.	0
4.2	0	.	.	.	.	.	.	.	.	.	.	.	0
4.3	0	.	.	.	.	.	.	.	.	.	.	.	0
4.4	0	.	.	.	.	.	.	.	.	.	.	.	0
4.5	0								

[illegible][illegible]

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0	0	308	95	817	345	155	265	398	167	46	.	.	2596	
0	0.49	100	157	213	189	327	253	204	234	223	.	.	10076	
0	0.99	13	106	452	828	378	177	117	340	749	.	.	7284	
0	1.49	.	17	73	148	148	78	126	995	689	.	.	2776	
0	1.99	.	.	.	20	29	1	15	131	161	.	.	380	
0	2.49	.	.	.	.	.	.	.	10	17	.	.	27	
0	2.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	3.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	3.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	4.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	4.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	5.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	5.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	6.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	6.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	7.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	7.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	8.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	8.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	9.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	9.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	10.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	10.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	11.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	11.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	12.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	12.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	13.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	13.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	14.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	14.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	15.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	15.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	16.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	16.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	17.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	17.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	18.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	18.99	.	.	.	.	.	.	.	.	.	.	.	0	
0	19.49	.	.	.	.	.	.	.	.	.	.	.	0	
0	19.99	.	.											

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	812	54	2048	1105	2068	4327	3069	361	5	8	.	13857
0.5-0.99	609	338	3559	2103	1897	5244	8904	3713	29	5	.	26401
1.0-1.49	111	220	337	508	234	432	1514	2349	10	.	.	5715
1.5-1.99	3	44	20	44	27	5	44	207	8	.	.	402
2.0-2.49	.	3	1	1	.	.	5	10	.	.	.	20
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	.	0
6.5-6.99	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.49	.	.	.	.	.	.	.	.	.	.	.	0
7.5-7.99	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.49	.	.	.	.	.	.	.	.	.	.	.	0
8.5-8.99	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.49	.	.	.	.	.	.	.	.	.	.	.	0
9.5-9.99	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1535	659	5965	3761	4226	10008	13536	6640	52	13	0	

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.3 MEAN TP(SEC) = 10.8 NO. OF CASES = 27124.

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	1545	.	.	.	.	.	.	.	.	.	.	1545
0.5-0.99	2582	.	.	.	.	.	.	.	.	.	.	2582
1.0-1.49	75	.	.	.	.	.	.	.	.	.	.	75
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	4202	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.2 MEAN TP(SEC) = 2.9 NO. OF CASES = 2456.

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	3641	.	.	.	.	.	.	.	.	.	.	3641
0.5-0.99	2298	.	.	.	.	.	.	.	.	.	.	2298
1.0-1.49	5	.	.	.	.	.	.	.	.	.	.	5
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	5944	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.1 MEAN TP(SEC) = 2.7 NO. OF CASES = 3474.

STATION 18 34.00N 118.52W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	3506	.	.	.	.	.	.	.	.	.	.	3506
0.5-0.99	487	.	.	.	.	.	.	.	.	.	.	487
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	3993	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.3 LARGEST HS(M) = 0.8 MEAN TP(SEC) = 2.5 NO. OF CASES = 2334.

TOTAL

MEAN HS (METERS) BY MONTH AND YEAR

WIS STATION 18 (34.00N 118.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.7	0.7	0.6	0.6	0.6	0.5	0.4	0.5	0.4	0.4	0.7	0.7	0.6
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
MEAN	0.9	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.5	0.7	0.9	

LARGEST HS (METERS) BY MONTH AND YEAR

WIS STATION 18 (34.00N 118.52W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	

20 YR. STATISTICS FOR WIS STATION 18 (34.00N 118.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.6
MEAN PEAK WAVE PERIOD (SECONDS) =	8.5
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	4.6
LARGEST HS (METERS) =	2.7
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	14.3
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	252.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	58040400

STATION 19 34.00N 118.72W AZIMUTH(DEGREES) = 67.5											
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION											
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.49	1093	.	.	.	.	.	.	.	.	.	1093
0.45	971	1	.	.	.	.	.	.	.	.	972
0.41	83	.	.	.	.	.	.	.	.	.	84
0.37	.	.	.	.	.	.	.	.	.	.	0
0.33	.	.	.	.	.	.	.	.	.	.	0
0.29	.	.	.	.	.	.	.	.	.	.	0
0.25	.	.	.	.	.	.	.	.	.	.	0
0.21	.	.	.	.	.	.	.	.	.	.	0
0.17	.	.	.	.	.	.	.	.	.	.	0
0.13	.	.	.	.	.	.	.	.	.	.	0
0.09	.	.	.	.	.	.	.	.	.	.	0
0.05	.	.	.	.	.	.	.	.	.	.	0
0.01	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2147	1	0	0	0	0	0	0	0	0	0
MEAN HS(M) =	0.5	LARGEST HS(M) =		1.3	MEAN TP(SEC) =		2.7	NO. OF CASES =		1257.	

[illegible][illegible][illegible][illegible]

STATION 19 34.00N 118.72W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER
0.0 - 0.49	75	1	1	.	.	1	.	.	.	.	76
0.5 - 0.99	.	13	11	.	.	.	.	.	.	.	25
1.0 - 1.49	.	18	15	.	.	.	.	.	.	.	53
1.5 - 1.99	.	1	.	11	1	.	.	.	.	.	14
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
5.5 - 5.99	0
6.0 - 6.49	0
6.5 - 6.99	0
7.0 - 7.49	0
7.5 - 7.99	0
8.0 - 8.49	0
8.5 - 8.99	0
9.0 - 9.49	0
9.5 - 9.99	0
10.0 - 10.49	0
10.5 - 10.99	0
11.0 - 11.49	0
11.5 - 11.99	0
12.0 - 12.49	0
12.5 - 12.99	0
13.0 - 13.49	0
13.5 - 13.99	0
14.0 - 14.49	0
14.5 - 14.99	0
15.0 - 15.49	0
15.5 - 15.99	0
16.0 - 16.49	0
16.5 - 16.99	0
17.0 - 17.49	0
17.5 - 17.99	0
18.0 - 18.49	0
18.5 - 18.99	0
19.0 - 19.49	0
19.5 - 19.99	0
20.0 - 20.49	0
20.5 - 20.99	0
21.0 - 21.49	0
21.5 - 21.99	0
22.0 - 22.49	0
22.5 - 22.99	0
23.0 - 23.49	0
23.5 - 23.99	0
24.0 - 24.49	0
24.5 - 24.99	0
25.0 - 25.49	0
25.5 - 25.99	0
26.0 - 26.49	0
26.5 - 26.99	0
27.0 - 27.49	0
27.5 - 27.99	0
28.0 - 28.49	0
28.5 - 28.99	0
29.0 - 29.49	0
29.5 - 29.99	0
30.0 - 30.49	0
30.5 - 30.99	0
31.0 - 31.49	0
31.5 - 31.99	0
32.0 - 32.49	0
32.5 - 32.99	0
33.0 - 33.49	0
33.5 - 33.99	0
34.0 - 34.49	0
34.5 - 34.99	0
35.0 - 35.49	0
35.5 - 35.99	0
36.0 - 36.49	0
36.5 - 36.99	0
37.0 - 37.49	0
37.5 - 37.99	0
38.0 - 38.49	0
38.5 - 38.99	0
39.0 - 39.49	0
39.5 - 39.99	0
40.0 - 40.49	0
40.5 - 40.99	0
41.0 - 41.49	0
41.5 - 41.99	0
42.0 - 42.49	0
42.5 - 42.99	0
43.0 - 43.49	0
43.5 - 43.99	0
44.0 - 44.49	0
44.5 - 44.99	0
45.0 - 45.49	0
45.5 - 45.99	0
46.0 - 46.49	0
46.5 - 46.99	0
47.0 - 47.49	0
47.5 - 47.99	0
48.0 - 48.49	0
48.5 - 48.99	0
49.0 - 49.49	0
49.5 - 49.99	0
50.0 - 50.49	0
50.5 - 50.99	0
51.0 - 51.49	0
51.5 - 51.99	0
52.0 - 52.49	0
52.5 - 52.99	0
53.0 - 53.49	0
53.5 - 53.99	0
54.0 - 54.49	0
54.5 - 54.99	0
55.0 - 55.49	0
55.5 - 55.99	0
56.0 - 56.49	0
56.5 - 56.99	0
57.0 - 57.49	0
57.5 - 57.99	0
58.0 - 58.49	0
58.5 - 58.99	0
59.0 - 59.49	0
59.5 - 59.99	0
60.0 - 60.49	0
60.5 - 60.99	0
61.0 - 61.49	0
61.5 - 61.99	0
62.0 - 62.49	0
62.5 - 62.99	0
63.0 - 63.49	0
63.5 - 63.99	0
64.0 - 64.49	0
64.5 - 64.99	0
65.0 - 65.49	0
65.5 - 65.99	0
66.0 - 66.49	0
66.5 - 66.99	0
67.0 - 67.49	0
67.5 - 67.99	0
68.0 - 68.49	0
68.5 - 68.99	0
69.0 - 69.49	0
69.5 - 69.99	0
70.0 - 70.49	0
70.5 - 70.99	0
71.0 - 71.49	0
71.5 - 71.99	0
72.0 - 72.49	0
72.5 - 72.99	0
73.0 - 73.49	0
73.5 - 73.99	0
74.0 - 74.49	0
74.5 - 74.99	0
75.0 - 75.49	0
75.5 - 75.99	0
76.0 - 76.49	0
76.5 - 76.99	0
77.0 - 77.49	0
77.5 - 77.99	0
78.0 - 78.49	0
78.5 - 78.99	0
79.0 - 79.49	0
79.5 - 79.99	0
80.0 - 80.49	0
80.5 - 80.99	0
81.0 - 81.49	0
81.5 - 81.99	0
82.0 - 82.49	0
82.5 - 82.99	0
83.0 - 83.49	0
83.5 - 83.99	0
84.0 - 84.49	0
84.5 - 84.99	0
85.0 - 85.49	0
85.5 - 85.99	0
86.0 - 86.49	0
86.5 - 86.99	0
87.0 - 87.49	0
87.5 - 87.99	0
88.0 - 88.49						

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL	
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3		22.3-LONGER
0.0	646	97	2700	2657	3283	4235	2291	393	269	.	.	16331
0.1	422	407	5506	3327	3660	6860	3358	4077	269	.	.	18667
0.2	66	253	713	968	385	778	2296	2705	420	.	.	9613
0.3	1	3	3	107	61	32	162	420	28	.	.	3377
0.4	.	.	.	8	1	1	6	22	9	.	.	00000
0.5	.	.	.	.	.	.	.	.	.	.	.	00000
0.6	.	.	.	.	.	.	.	.	.	.	.	00000
0.7	.	.	.	.	.	.	.	.	.	.	.	00000
0.8	.	.	.	.	.	.	.	.	.	.	.	00000
0.9	.	.	.	.	.	.	.	.	.	.	.	00000
1.0	.	.	.	.	.	.	.	.	.	.	.	00000
TOTAL	1135	795	8949	7068	7333	11906	14113	7617	899	0	0	0
MEAN HS(M) =	0.7	LARGEST HS(M) =	2.4	MEAN TP(SEC) =	10.7	NO. OF CASES =	34969.					

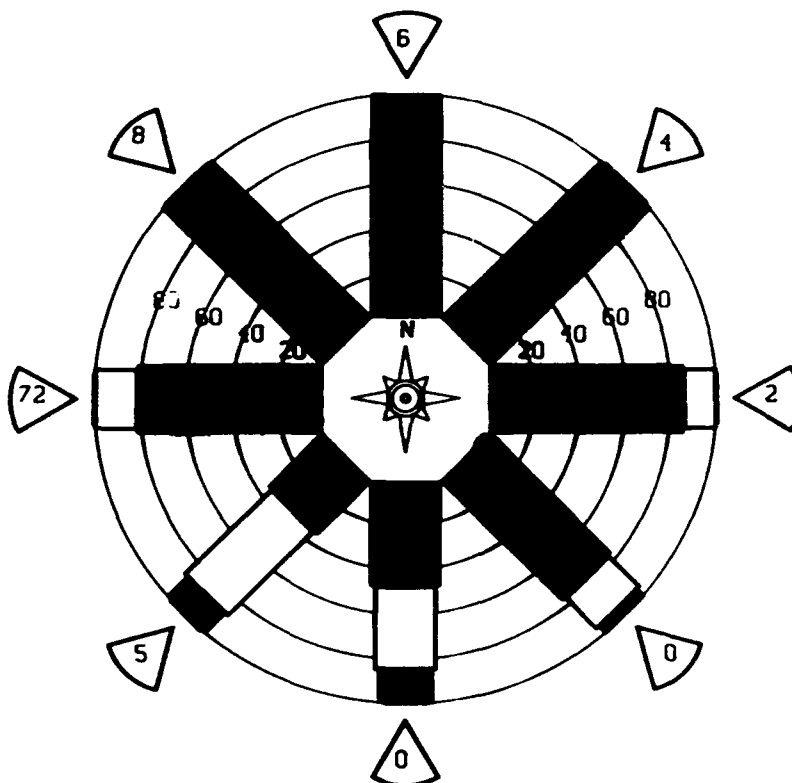
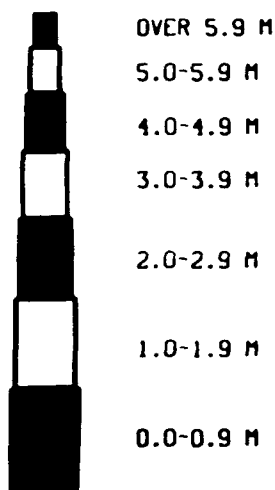
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HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.0	2766	.	.	.	.	.	.	.	.	.	.	2766
0.1	0.1	408	.	.	.	.	.	.	.	.	.	.	408
0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	.
0.3	0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	1.0	.	.	.	.	.	.	.	.	.	.	.	.
1.1	1.1	.	.	.	.	.	.	.	.	.	.	.	.
1.2	1.2	.	.	.	.	.	.	.	.	.	.	.	.
1.3	1.3	.	.	.	.	.	.	.	.	.	.	.	.
1.4	1.4	.	.	.	.	.	.	.	.	.	.	.	.
1.5	1.5	.	.	.	.	.	.	.	.	.	.	.	.
1.6	1.6	.	.	.	.	.	.	.	.	.	.	.	.
1.7	1.7	.	.	.	.	.	.	.	.	.	.	.	.
1.8	1.8	.	.	.	.	.	.	.	.	.	.	.	.
1.9	1.9	.	.	.	.	.	.	.	.	.	.	.	.
2.0	2.0	.	.	.	.	.	.	.	.	.	.	.	.
2.1	2.1	.	.	.	.	.	.	.	.	.	.	.	.
2.2	2.2	.	.	.	.	.	.	.	.	.	.	.	.
2.3	2.3	.	.	.	.	.	.	.	.	.	.	.	.
2.4	2.4	.	.	.	.	.	.	.	.	.	.	.	.
2.5	2.5	.	.	.	.	.	.	.	.	.	.	.	.
2.6	2.6	.	.	.	.	.	.	.	.	.	.	.	.
2.7	2.7	.	.	.	.	.	.	.	.	.	.	.	.
2.8	2.8	.	.	.	.	.	.	.	.	.	.	.	.
2.9	2.9	.	.	.	.	.	.	.	.	.	.	.	.
3.0	3.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL		3174	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.3		LARGEST HS(M) = 0.8		MEAN TP(SEC) = 2.5		NO. OF CASES = 1856.							

STATION 19 34.00N 118.72W FOR ALL DIRECTIONS												TOTAL
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS												
HEIGHT(METERS)	PERIOD(SECONDS)											
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	1652	29	354	299	339	441	238	40	2	.	.	3394
1.0-1.9	814	75	827	491	382	747	582	432	31	.	.	4791
2.0-2.9	44	19	224	205	71	106	293	316	45	.	.	1363
3.0-3.9	1	2	14	77	25	15	29	79	12	.	.	339
4.0-4.9	.	.	.	10	3	1	4	8	4	.	.	69
5.0-5.9	.	.	.	1	.	.	.	2	.	.	.	17
6.0-6.9	0
7.0-7.9	0
8.0-8.9	0
9.0-9.9	0
10.0-10.9	0
11.0-11.9	0
12.0-12.9	0
13.0-13.9	0
14.0-14.9	0
15.0-15.9	0
16.0-16.9	0
17.0-17.9	0
18.0-18.9	0
19.0-19.9	0
20.0-20.9	0
21.0-21.9	0
22.0-22.9	0
23.0-23.9	0
24.0-24.9	0
25.0-25.9	0
26.0-26.9	0
27.0-27.9	0
28.0-28.9	0
29.0-29.9	0
30.0-30.9	0
31.0-31.9	0
32.0-32.9	0
33.0-33.9	0
34.0-34.9	0
35.0-35.9	0
36.0-36.9	0
37.0-37.9	0
38.0-38.9	0
39.0-39.9	0
40.0-40.9	0
41.0-41.9	0
42.0-42.9	0
43.0-43.9	0
44.0-44.9	0
45.0-45.9	0
46.0-46.9	0
47.0-47.9	0
48.0-48.9	0
49.0-49.9	0
50.0-50.9	0
51.0-51.9	0
52.0-52.9	0
53.0-53.9	0
54.0-54.9	0
55.0-55.9	0
56.0-56.9	0
57.0-57.9	0
58.0-58.9	0
59.0-59.9	0
60.0-60.9	0
61.0-61.9	0
62.0-62.9	0
63.0-63.9	0
64.0-64.9	0
65.0-65.9	0
66.0-66.9	0
67.0-67.9	0
68.0-68.9	0
69.0-69.9	0
70.0-70.9	0
71.0-71.9	0
72.0-72.9	0
73.0-73.9	0
74.0-74.9	0
75.0-75.9	0
76.0-76.9	0
77.0-77.9	0
78.0-78.9	0
79.0-79.9	0
80.0-80.9	0
81.0-81.9	0
82.0-82.9	0
83.0-83.9	0
84.0-84.9	0
85.0-85.9	0
86.0-86.9	0
87.0-87.9	0
88.0-88.9	0
89.0-89.9	0
90.0-90.9	0
91.0-91.9	0
92.0-92.9	0
93.0-93.9	0
94.0-94.9	0
95.0-95.9	0
96.0-96.9	0
97.0-97.9	0
98.0-98.9	0
99.0-99.9	0
TOTAL	2511	184	1501	1110	829	1311	1557	877	94	0	0	
MEAN HS(M) =	0.7	LARGEST HS(M) =	3.5	MEAN TP(SEC) =	8.5	TOTAL CASES =	58440.					

MEAN HS(M) = 0.7 LARGEST HS(M) = 3.5 MEAN TP(SEC) = 8.5 TOTAL CASES = 58440.

STATION 19
34.00N, 118.72W
58440 CASES



MONTH

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.0	0.8	0.7	0.6	0.0	0.6	0.0	0.5	0.0	0.0	0.7	0.7	0.6
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.9	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.5	0.7	0.9	0.6

MONTH

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20 YR. STATISTICS FOR WIS STATION 19 (34.00N 118.72W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.7
MEAN PEAK WAVE PERIOD (SECONDS) =	8.5
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	4.1
LARGEST HS (METERS) =	3.5
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	10.0
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	196.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	59021615

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	2337	.	.	.	.	.	.	.	.	.	.	.	2337
0.1	352	.	.	.	.	.	.	.	.	.	.	.	352
0.2	.	1	.	.	.	.	.	.	.	.	.	.	1
0.3	.	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	.	0
1.1	.	.	.	.	.	.	.	.	.	.	.	.	0
1.2	.	.	.	.	.	.	.	.	.	.	.	.	0
1.3	.	.	.	.	.	.	.	.	.	.	.	.	0
1.4	.	.	.	.	.	.	.	.	.	.	.	.	0
1.5	.	.	.	.	.	.	.	.	.	.	.	.	0
1.6	.	.	.	.	.	.	.	.	.	.	.	.	0
1.7	.	.	.	.	.	.	.	.	.	.	.	.	0
1.8	.	.	.	.	.	.	.	.	.	.	.	.	0
1.9	.	.	.	.	.	.	.	.	.	.	.	.	0
2.0	.	.	.	.	.	.	.	.	.	.	.	.	0
2.1	.	.	.	.	.	.	.	.	.	.	.	.	0
2.2	.	.	.	.	.	.	.	.	.	.	.	.	0
2.3	.	.	.	.	.	.	.	.	.	.	.	.	0
2.4	.	.	.	.	.	.	.	.	.	.	.	.	0
2.5	.	.	.	.	.	.	.	.	.	.	.	.	0
2.6	0
2.7	0
2.8	0
2.9	0
3.0	0
3.1	0
3.2	0
3.3	0
3.4	0
3.5	0
3.6	0
3.7	0
3.8	0
3.9	0
4.0	0
4.1	0
4.2	0
4.3	0
4.4	0
4.5	0
4.6</								

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HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	1221	.	.	.	.	.	.	.	.	.	.	.	1221
0.1	663	.	.	.	.	.	.	.	.	.	.	.	663
0.2	333	.	.	.	.	.	.	.	.	.	.	.	333
0.3	111	.	.	.	.	.	.	.	.	.	.	.	111
0.4	111	.	.	.	.	.	.	.	.	.	.	.	111
0.5	111	.	.	.	.	.	.	.	.	.	.	.	111
0.6	111	.	.	.	.	.	.	.	.	.	.	.	111
0.7	111	.	.	.	.	.	.	.	.	.	.	.	111
0.8	111	.	.	.	.	.	.	.	.	.	.	.	111
0.9	111	.	.	.	.	.	.	.	.	.	.	.	111
1.0	111	.	.	.	.	.	.	.	.	.	.	.	111
1.1	111	.	.	.	.	.	.	.	.	.	.	.	111
1.2	111	.	.	.	.	.	.	.	.	.	.	.	111
1.3	111	.	.	.	.	.	.	.	.	.	.	.	111
1.4	111	.	.	.	.	.	.	.	.	.	.	.	111
1.5	111	.	.	.	.	.	.	.	.	.	.	.	111
1.6	111	.	.	.	.	.	.	.	.	.	.	.	111
1.7	111	.	.	.	.	.	.	.	.	.	.	.	111
1.8	111	.	.	.	.	.	.	.	.	.	.	.	111
1.9	111	.	.	.	.	.	.	.	.	.	.	.	111
2.0	111	.	.	.	.	.	.	.	.	.	.	.	111
2.1	111	.	.	.	.	.	.	.	.	.	.	.	111
2.2	111	.	.	.	.	.	.	.	.	.	.	.	111
2.3	111	.	.	.	.	.	.	.	.	.	.	.	111
2.4	111	.	.	.	.	.	.	.	.	.	.	.	111
2.5	111	.	.	.	.	.	.	.	.	.	.	.	111
2.6	111	.	.	.	.	.	.	.	.	.	.	.	111
2.7	111	.	.	.	.	.	.	.	.	.	.	.	111
2.8	111	.	.	.	.	.	.	.	.	.	.	.	111
2.9	111	.	.	.	.	.	.	.	.	.	.	.	111
3.0	111	.	.	.	.	.	.	.	.	.	.	.	111
3.1	111	.	.	.	.	.	.	.	.	.	.	.	111
3.2	111	.	.	.	.	.	.	.	.	.	.	.	111
3.3	111	.	.	.	.	.	.	.	.	.	.	.	111
3.4	111	.	.	.	.	.	.	.	.	.	.	.	111
3.5	111	.	.	.	.	.	.	.	.	.	.	.	111
3.6	111	.	.	.	.	.	.	.	.	.	.	.	111
3.7	111	.	.	.	.	.	.	.	.	.	.	.	111
3.8	111	.	.	.	.	.	.	.	.	.	.	.	111
3.9	111	.	.	.	.	.	.	.	.	.	.	.	111
4.0	111	.	.	.	.	.	.	.	.	.	.	.	111
4.1	111	.	.	.	.	.	.	.	.	.	.	.	111
4.2	111	.	.	.	.	.	.	.	.	.	.	.	111
4.3	111								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	6	1	.	.	.	.	.	.	.	.	.	653
0.1	0	5	.	.	.	.	.	.	.	.	.	.	628
0.2	0	5	.	.	.	.	.	.	.	.	.	.	640
0.3	0	5	.	.	.	.	.	.	.	.	.	.	600
0.4	0	5	.	.	.	.	.	.	.	.	.	.	600
0.5	0	5	.	.	.	.	.	.	.	.	.	.	600
0.6	0	5	.	.	.	.	.	.	.	.	.	.	600
0.7	0	5	.	.	.	.	.	.	.	.	.	.	600
0.8	0	5	.	.	.	.	.	.	.	.	.	.	600
0.9	0	5	.	.	.	.	.	.	.	.	.	.	600
1.0	0	5	.	.	.	.	.	.	.	.	.	.	600
1.1	0	5	.	.	.	.	.	.	.	.	.	.	600
1.2	0	5	.	.	.	.	.	.	.	.	.	.	600
1.3	0	5	.	.	.	.	.	.	.	.	.	.	600
1.4	0	5	.	.	.	.	.	.	.	.	.	.	600
1.5	0	5	.	.	.	.	.	.	.	.	.	.	600
1.6	0	5	.	.	.	.	.	.	.	.	.	.	600
1.7	0	5	.	.	.	.	.	.	.	.	.	.	600
1.8	0	5	.	.	.	.	.	.	.	.	.	.	600
1.9	0	5	.	.	.	.	.	.	.	.	.	.	600
2.0	0	5	.	.	.	.	.	.	.	.	.	.	600
2.1	0	5	.	.	.	.	.	.	.	.	.	.	600
2.2	0	5	.	.	.	.	.	.	.	.	.	.	600
2.3	0	5	.	.	.	.	.	.	.	.	.	.	600
2.4	0	5	.	.	.	.	.	.	.	.	.	.	600
2.5	0	5	.	.	.	.	.	.	.	.	.	.	600
2.6	0	5	.	.	.	.	.	.	.	.	.	.	600
2.7	0	5	.	.	.	.	.	.	.	.	.	.	600
2.8	0	5	.	.	.	.	.	.	.	.	.	.	600
2.9	0	5	.	.	.	.	.	.	.	.	.	.	600
3.0	0	5	.	.	.	.	.	.	.	.	.	.	600
3.1	0	5	.	.	.	.	.	.	.	.	.	.	600
3.2	0	5	.	.	.	.	.	.	.	.	.	.	600
3.3	0	5	.	.	.	.	.	.	.	.	.	.	600
3.4	0	5	.	.	.	.	.	.	.	.	.	.	600
3.5	0	5	.	.	.	.	.	.	.	.	.	.	600
3.6	0	5	.	.	.	.	.	.	.	.	.	.	600
3.7	0	5	.	.	.	.	.	.	.	.	.	.	600
3.8	0	5	.	.	.	.	.	.	.	.	.	.	600
3.9	0	5	.	.	.	.	.	.	.	.	.	.	600
4.0	0	5	.	.	.	.	.	.	.	.	.	.	600
4.1	0	5	.	.	.	.	.	.	.	.	.	.	600
4.2	0	5	.	.	.	.	.	.	.	.	.	.	600
4.3	0	5	.	.	.								

[illegible]

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	42	1	8	25	.	.	.	.	.	.	.	76
1.0-1.9	1	27	3	11	.	3	.	.	.	.	.	43
2.0-2.9	.	11	20	25	1	1	.	.	.	.	.	60
3.0-3.9	.	1	8	3	1	1	.	.	1	.	.	43
4.0-4.9	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.9	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.9	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.9	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.9	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.9	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	43	43	44	60	4	5	0	0	1	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M) = 3.7 MEAN TP(SEC) = 6.3 NO. OF CASES = 126.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	20	.	8	32	3	5	.	.	.	.	.	60
1.0-1.9	3	18	11	32	1	6	3	.	.	.	.	60
2.0-2.9	.	1	11	41	1	.	.	3	.	.	.	59
3.0-3.9	.	.	.	44	.	.	.	.	.	.	.	14
4.0-4.9	.	.	.	8	5	.	.	.	.	.	.	14
5.0-5.9	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.9	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.9	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.9	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.9	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	23	25	64	170	13	16	11	3	0	0	0	

MEAN HS(M) = 1.4 LARGEST HS(M) = 3.6 MEAN TP(SEC) = 8.0 NO. OF CASES = 198.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	59	5	23	44	17	13	3	1	.	.	.	145
1.0-1.9	1	35	44	51	17	28	3	.	.	.	.	145
2.0-2.9	.	17	21	31	15	20	17	1	.	.	.	145
3.0-3.9	.	1	8	107	10	11	16	1	.	.	.	245
4.0-4.9	.	.	3	116	3	13	.	.	.	.	.	11
5.0-5.9	.	.	.	5	3	3	.	.	.	.	.	0
6.0-6.9	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.9	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.9	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.9	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	65	121	624	425	81	69	57	24	1	0	0	

MEAN HS(M) = 1.5 LARGEST HS(M) = 3.1 MEAN TP(SEC) = 7.9 NO. OF CASES = 870.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	148	106	273	203	166	97	35	.	.	.	.	933
1.0-1.9	37	167	116	203	146	340	202	11	.	.	.	2693
2.0-2.9	8	13	81	366	140	106	262	207	.	.	.	2693
3.0-3.9	.	.	41	106	20	5	13	32	8	.	.	145
4.0-4.9	.	.	.	3	.	.	.	.	.	.	.	8
5.0-5.9	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.9	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.9	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.9	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.9	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	193	397	2682	1919	665	858	1027	642	14	0	0	

MEAN HS(M) = 1.1 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 9.2 NO. OF CASES = 4923.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	402	118	3039	4324	3507	3465	1394	311	23	.	.	16583
0.5-0.99	2796	1350	6871	18675	5198	8700	9392	3172	2000	.	.	39728
1.0-1.49	42	90	930	254	193	143	4007	3145	396	.	.	12721
1.5-1.99	.	.	3	18	6	6	37	71	32	.	.	1904
2.0-2.49	173
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	719	895	10697	12107	9593	13768	15240	7449	642	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.5 MEAN TP(SEC) = 10.5 NO. OF CASES = 41571.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	906	.	10	371	217	68	.	.	.	.	.	1572
0.5-0.99	1180	13	25	213	200	42	.	.	.	.	.	1660
1.0-1.49	8	1	6	25	32	17	.	.	.	.	.	101
1.5-1.99	1	1	1	.	.	.	3
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	2094	14	41	609	449	128	1	1	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.0 MEAN TP(SEC) = 5.3 NO. OF CASES = 1957.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	2332	.	.	.	.	.	.	.	.	.	.	2332
0.5-0.99	1360	3	.	.	.	.	.	.	.	.	.	1360
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	3692	3	0	0	0	0	0	0	0	0	0	0

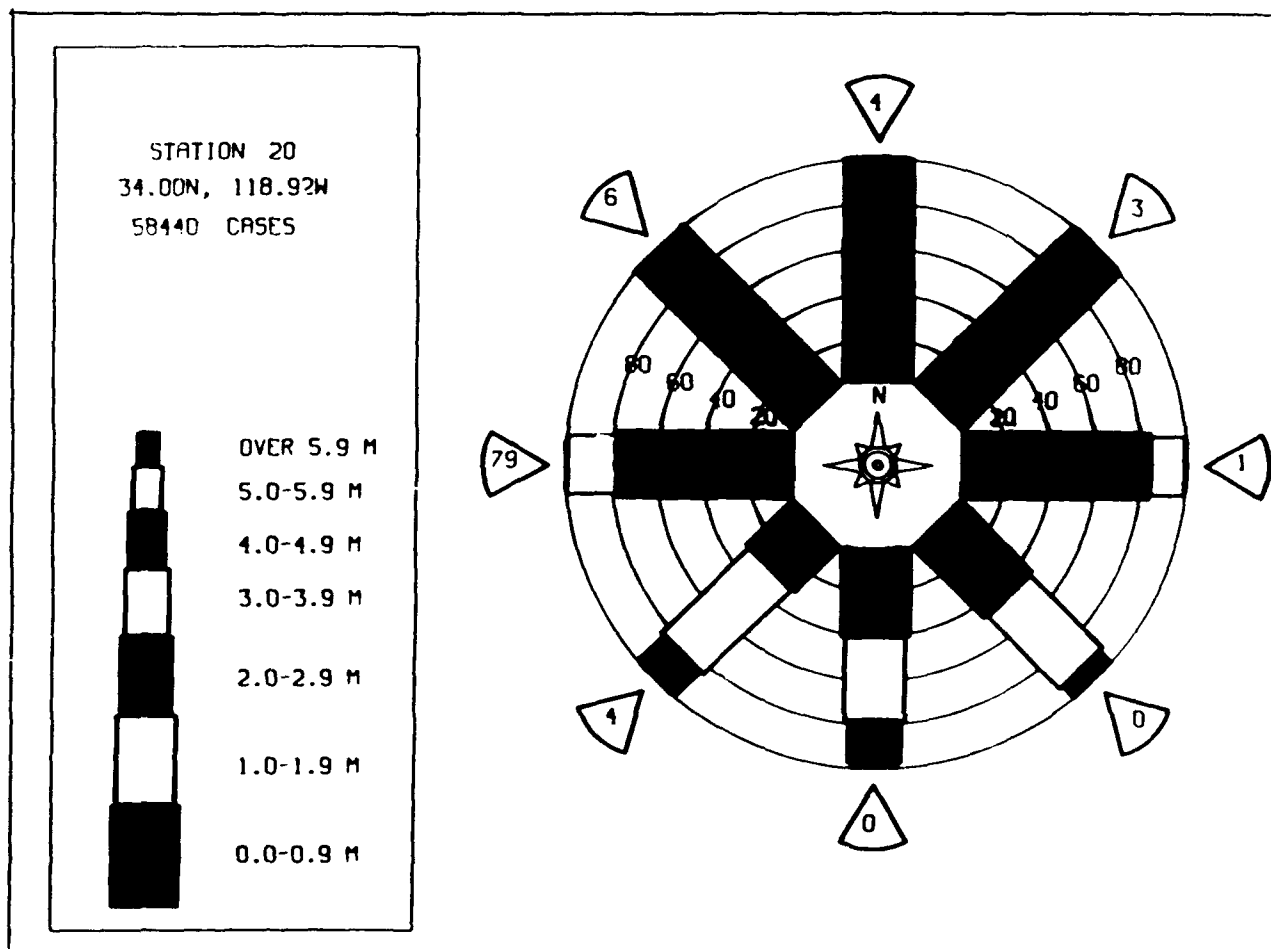
MEAN HS(M) = 0.4 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.7 NO. OF CASES = 2160.

STATION 20 34.00N 118.92W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	2150	.	.	.	.	.	.	.	.	.	.	2150
0.5-0.99	335	1	.	.	.	.	.	.	.	.	.	335
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
TOTAL	2485	1	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.3 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 2.5 NO. OF CASES = 1454.

STATION 20 34.00N 118.92W FOR ALL DIRECTIONS													TOTAL	
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS														
HEIGHT(METERS)	PERIOD(SECONDS)													
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-30.0	LONGER		
0.0-0.9	1204	23	336	500	379	364	143	31	2	.	.	.	2982	
1.0-1.9	562	60	792	662	556	915	967	328	100	.	.	.	4862	
2.0-2.9	20	66	199	248	94	179	448	35	10	.	.	.	1618	
3.0-3.9	.	24	78	77	35	20	66	15	4	.	.	.	488	
4.0-4.9	.	1	15	30	10	3	7	3	.	.	.	.	100
5.0-5.9	.	.	1	1	3	1	1	.	.	.	.	.	10
6.0-6.9	.	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.9	.	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.9	.	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.9	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1786	174	1421	1527	1077	1482	1632	810	65	0	0	0	58440	
MEAN HS(M) = 0.7 LARGEST HS(M) = 3.7 MEAN TP(SEC) = 9.0 TOTAL CASES = 58440.														



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 20 (34.00N 118.92W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.0	1.0	0.8	0.8	0.7	0.6	0.5	0.4	0.5	0.5	0.7	1.0	0.6

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 20 (34.00N 118.92W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1957	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1958	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1959	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1960	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1961	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1962	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1963	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1964	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1965	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1966	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1967	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1968	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1969	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1970	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1971	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1972	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1973	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1974	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
1975	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

20 YR. STATISTICS FOR WIS STATION 20 (34.00N 118.92W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 0.7
 MEAN PEAK WAVE PERIOD (SECONDS) = 9.0
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.4
 STANDARD DEVIATION OF TP (SECONDS) = 3.7
 LARGEST HS (METERS) = 3.7
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 11.1
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 190.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 59021615

TOTAL

Category	Count	Percentage
1	5	5.4%
2	5	5.4%
3	5	5.4%
4	5	5.4%
5	5	5.4%
6	5	5.4%
7	5	5.4%
8	5	5.4%
9	5	5.4%
10	5	5.4%
11	5	5.4%
12	5	5.4%
13	5	5.4%
14	5	5.4%
15	5	5.4%
16	5	5.4%
17	5	5.4%
18	5	5.4%
19	5	5.4%
20	5	5.4%
21	5	5.4%
22	5	5.4%
23	5	5.4%
24	5	5.4%
25	5	5.4%
26	5	5.4%
27	5	5.4%
28	5	5.4%
29	5	5.4%
30	5	5.4%
31	5	5.4%
32	5	5.4%
33	5	5.4%
34	5	5.4%
35	5	5.4%
36	5	5.4%
37	5	5.4%
38	5	5.4%
39	5	5.4%
40	5	5.4%
41	5	5.4%
42	5	5.4%
43	5	5.4%
44	5	5.4%
45	5	5.4%
46	5	5.4%
47	5	5.4%
48	5	5.4%
49	5	5.4%
50	5	5.4%
TOTAL	90	100.0%

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
99	.	.	.	.	.	.	.	.	.	.
130	10	8	.	.	.	.	.	.	.	.
15	23	8	.	.	.	1	.	.	.	.
.
.
.
244	33	16	0	0	0	1	0	0	0	0

13099
32516

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 3.4 NO. OF CASES = 174.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
22	3	.	.	.	.	.	.	.	.	.
6	25	.	.	.	.	.	.	.	.	.
.	18	29	.	.	.	.	.	.	.	.
.	1	20	.	.	.	.	.	.	.	.
.	.	10	.	.	.	.	.	.	.	.
.	.	3	.	.	.	.	.	.	.	.
.
28	67	62	0	0	0	0	0	0	0	0

229
257
472
103
000
000

MEAN HS(M) = 1.5 LARGEST HS(M) = 3.2 MEAN TP(SEC) = 5.3 NO. OF CASES = 83.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
13	1	8	.	.	.	.	.	.	.	.
.	6	15	.	.	.	.	.	.	.	.
.	.	3	.	.	.	.	.	.	.	.
.
.
13	13	27	0	0	0	0	0	0	0	0

1

MEAN HS(M) = 1.1 LARGEST HS(M) = 2.8 MEAN TP(SEC) = 5.1 NO. OF CASES = 34.

TOTAL[illegible]

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
5	1	1	.	.	i	.	.	.	.	.
1	1	3	.	.	.	.	.	.	.	.
.	15	6	.	i	.	.	.	.	.	.
.	6	13	1	1	.	.	.	.	.	.
.	.	3	1	.	.	.	.	i	.	.
.
.
6	23	26	2	2	1	0	0	1	0	0

1-800-370-0000
222

MEAN HS(M) = 1.3 LARGEST HS(M) = 2.7 MEAN TP(SEC) = 6.5 NO. OF CASES = 42.

STATION 21 34.00N 119.12W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	11	1	10	22	.	.	.	.	.	.	44
0.5-0.99	1	1	10	22	.	.	.	.	.	.	44
1.0-1.49	.	10	10	10	1	1	.	.	.	.	14
1.5-1.99	.	.	10	10	1	1	.	.	.	.	14
2.0-2.49	.	.	10	10	1	1	.	.	.	.	14
2.5-2.99	.	.	10	10	1	1	.	.	.	.	14
3.0-3.49	.	.	10	10	1	1	.	.	.	.	14
3.5-3.99	.	.	10	10	1	1	.	.	.	.	14
4.0-4.49	.	.	10	10	1	1	.	.	.	.	14
4.5-4.99	.	.	10	10	1	1	.	.	.	.	14
5.0-5.49	.	.	10	10	1	1	.	.	.	.	14
5.5-5.99	.	.	10	10	1	1	.	.	.	.	14
6.0-6.49	.	.	10	10	1	1	.	.	.	.	14
6.5-6.99	.	.	10	10	1	1	.	.	.	.	14
7.0-7.49	.	.	10	10	1	1	.	.	.	.	14
7.5-7.99	.	.	10	10	1	1	.	.	.	.	14
8.0-8.49	.	.	10	10	1	1	.	.	.	.	14
8.5-8.99	.	.	10	10	1	1	.	.	.	.	14
9.0-9.49	.	.	10	10	1	1	.	.	.	.	14
9.5-9.99	.	.	10	10	1	1	.	.	.	.	14
10.0-10.49	.	.	10	10	1	1	.	.	.	.	14
10.5-10.99	.	.	10	10	1	1	.	.	.	.	14
11.0-11.49	.	.	10	10	1	1	.	.	.	.	14
11.5-11.99	.	.	10	10	1	1	.	.	.	.	14
12.0-12.49	.	.	10	10	1	1	.	.	.	.	14
12.5-12.99	.	.	10	10	1	1	.	.	.	.	14
13.0-13.49	.	.	10	10	1	1	.	.	.	.	14
13.5-13.99	.	.	10	10	1	1	.	.	.	.	14
14.0-14.49	.	.	10	10	1	1	.	.	.	.	14
14.5-14.99	.	.	10	10	1	1	.	.	.	.	14
15.0-15.49	.	.	10	10	1	1	.	.	.	.	14
15.5-15.99	.	.	10	10	1	1	.	.	.	.	14
16.0-16.49	.	.	10	10	1	1	.	.	.	.	14
16.5-16.99	.	.	10	10	1	1	.	.	.	.	14
17.0-17.49	.	.	10	10	1	1	.	.	.	.	14
17.5-17.99	.	.	10	10	1	1	.	.	.	.	14
18.0-18.49	.	.	10	10	1	1	.	.	.	.	14
18.5-18.99	.	.	10	10	1	1	.	.	.	.	14
19.0-19.49	.	.	10	10	1	1	.	.	.	.	14
19.5-19.99	.	.	10	10	1	1	.	.	.	.	14
20.0-20.49	.	.	10	10	1	1	.	.	.	.	14
20.5-20.99	.	.	10	10	1	1	.	.	.	.	14
21.0-21.49	.	.	10	10	1	1	.	.	.	.	14
21.5-21.99	.	.	10	10	1	1	.	.	.	.	14
22.0-22.49	.	.	10	10	1	1	.	.	.	.	14
22.5-22.99	.	.	10	10	1	1	.	.	.	.	14
23.0-23.49	.	.	10	10	1	1	.	.	.	.	14
23.5-23.99	.	.	10	10	1	1	.	.	.	.	14
24.0-24.49	.	.	10	10	1	1	.	.	.	.	14
24.5-24.99	.	.	10	10	1	1	.	.	.	.	14
25.0-25.49	.	.	10	10	1	1	.	.	.	.	14
25.5-25.99	.	.	10	10	1	1	.	.	.	.	14
26.0-26.49	.	.	10	10	1	1	.	.	.	.	14
26.5-26.99	.	.	10	10	1	1	.	.	.	.	14
27.0-27.49	.	.	10	10	1	1	.	.	.	.	14
27.5-27.99	.	.	10	10	1	1	.	.	.	.	14
28.0-28.49	.	.	10	10	1	1	.	.	.	.	14
28.5-28.99	.	.	10	10	1	1	.	.	.	.	14
29.0-29.49	.	.	10	10	1	1	.	.	.	.	14
29.5-29.99	.	.	10	10	1	1	.	.	.	.	14
30.0-30.49	.	.	10	10	1	1	.	.	.	.	14
30.5-30.99	.	.	10	10	1	1	.	.	.	.	14
31.0-31.49	.	.	10	10	1	1	.	.	.	.	14
31.5-31.99	.	.	10	10	1	1	.	.	.	.	14
32.0-32.49	.	.	10	10	1	1	.	.	.	.	14
32.5-32.99	.	.	10	10	1	1	.	.	.	.	14
33.0-33.49	.	.	10	10	1	1	.	.	.	.	14
33.5-33.99	.	.	10	10	1	1	.	.	.	.	14
34.0-34.49	.	.	10	10	1	1	.	.	.	.	14
34.5-34.99	.	.	10	10	1	1	.	.	.	.	14
35.0-35.49	.	.	10	10	1	1	.	.	.	.	14
35.5-35.99	.	.	10	10	1	1	.	.	.	.	14
36.0-36.49	.	.	10	10	1	1	.	.	.	.	14
36.5-36.99	.	.	10	10	1	1	.	.	.	.	14
37.0-37.49	.	.	10	10	1	1	.	.	.	.	14
37.5-37.99	.	.	10	10	1	1	.	.	.	.	14
38.0-38.49	.	.	10	10	1	1	.	.	.	.	14
38.5-38.99	.	.	10	10	1	1	.	.	.	.	14
39.0-39.49	.	.	10	10	1	1	.	.	.	.	14
39.5-39.99	.	.	10	10	1	1	.	.	.	.	14
40.0-40.49	.	.	10	10	1	1	.	.	.	.	14
40.5-40.99	.	.	10	10	1	1	.	.	.	.	14
41.0-41.49	.	.	10	10	1	1	.	.	.	.	14
41.5-41.99	.	.	10	10	1	1	.	.	.	.	14
42.0-42.49	.	.	10	10	1	1	.	.	.	.	14
42.5-42.99	.	.	10	10	1	1	.	.	.	.	14
43.0-43.49	.	.	10	10	1	1	.	.	.	.	14
43.5-43.99	.	.	10	10	1	1	.	.	.	.	14
44.0-44.49	.	.	10	10	1	1	.	.	.	.	14
44.5-44.99	.	.	10	10	1	1	.	.	.	.	14
45.0-45.49	.	.	10	10	1	1	.	.	.	.	14
45.5-45.99	.	.	10	10	1	1	.	.	.	.	14
46.0-46.49	.	.	10	10	1	1	.	.	.	.	14
46.5-46.99	.	.	10	10	1	1	.	.	.	.	14
47.0-47.49	.	.	10	10	1	1	.	.	.	.	14
47.5-47.99	.	.	10	10	1	1	.	.	.	.	14
48.0-48.49	.	.	10	10	1	1	.	.	.	.	14
48.5-48.99	.	.	10	10	1	1	.	.	.	.	14
49.0-49.49	.	.	10	10	1	1	.	.	.	.	14
49.5-49.99	.	.	10	10	1	1	.	.	.	.	14
50.0-50.49	.	.	10	10	1	1	.	.	.	.	14
50.5-50.99	.	.	10	10	1	1	.	.	.	.	14
51.0-51.49	.	.	10	10	1	1	.	.	.	.	14
51.5-51.99	.	.	10	10	1	1	.	.	.	.	14
52.0-52.49	.	.	10	10	1	1	.	.	.	.	14
52.5-52.99	.	.	10	10	1	1	.	.	.	.	14
53.0-53.49	.	.	10	10	1	1	.	.	.	.	14
53.5-53.99	.	.	10	10	1	1	.	.	.	.	14
54.0-54.49	.	.	10	10	1	1	.	.	.	.	14
54.5-54.99	.	.	10	10	1	1	.	.	.	.	14
55.0-55.49	.	.	10	10	1	1	.	.	.	.	14
55.5-55.99	.	.	10	10	1	1	.	.	.	.	14
56.0-56.49	.	.	10	10	1	1	.	.	.	.	14
56.5-56.99	.	.	10	10	1	1	.	.	.	.	14
57.0-57.49	.	.	10	10	1	1	.	.	.	.	14
57.5-57.99	.	.	10	10	1	1	.	.	.	.	14
58.0-58.49	.	.	10	10	1	1	.	.	.	.	14
58.5-58.99	.	.	10	10	1	1	.	.	.	.	14
59.0-59.49	.	.	10	10	1	1	.	.	.	.	14
59.5-59.99	.	.	10	10	1	1	.	.	.	.	14
60.0-60.49	.	.	10	10	1	1	.	.	.	.	14
60.5-60.99	.	.	10	10	1	1	.	.	.	.	14
61.0-61.49	.	.	10	10	1	1	.	.	.	.	14
61.5-61.99	.	.	10	10	1	1	.	.	.	.	14
62.0-62.49	.	.	10	10	1	1	.	.	.	.	14
62.5-62.99	.	.	10	10	1	1	.	.	.	.	14
63.0-63.49	.	.	10	10	1	1	.	.	.	.	14
63.5-63.99	.	.	10	10	1	1	.	.	.	.	14
64.0-64.49	.	.	10	10	1	1	.	.	.	.	14
64.5-64.99	.	.	10	10	1	1	.	.	.	.	14
65.0-65.49	.	.	10	10	1	1	.	.	.	.	14
65.5-65.99	.	.	10	10	1	1	.	.	.	.	14
66.0-66.49	.	.	10	10	1	1	.	.	.	.	14
66.5-66.99	.	.	10	10	1	1	.	.	.	.	14
67.0-67.49	.	.	10	10	1	1	.	.	.	.	14
67.5-67.99	.	.	10	10	1	1	.	.	.	.	14
68.0-68.49	.	.	10	10	1	1	.	.	.	.	14
68.5-68.99	.	.	10	10	1	1	.	.	.	.	14
69.0-69.49	.	.	10	10	1	1	.	.	.	.	14
69.5-69.99	.	.	10	10	1	1	.	.	.	.	14
70.0-70.49	.	.	10	10	1	1	.	.	.	.	14
70.5-70.99	.	.	10	10	1	1	.	.	.	.	14
71.0-71.49	.	.	10	10	1	1	.	.	.	.	14
71.5-71.99	.	.	10	10	1	1	.	.	.	.	14
72.0-72.49	.	.	10	10	1	1	.	.	.	.	14
72.5-72.99	.	.	10	10	1	1	.	.	.	.	14
73.0-73.49	.	.	10	10	1	1	.	.	.	.	14
73.5-73.99	.	.	10	10	1	1	.	.	.	.	14
74.0-74.49	.	.	10	10	1	1	.	.	.	.	14
74.5-74.99	.	.	10	10	1	1	.	.	.	.	14
75.0-75.49	.	.	10	10	1	1	.	.	.	.	14
75.5-75.99	.	.	10	10	1	1	.	.	.	.	14
76.0-76.49	.	.	10	10	1	1	.	.	.	.	14
76.5-76.99	.	.	10	10	1	1	.	.	.	.	14
77.0-77.49	.	.									

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	183	71	1440	1596	710	667	417	162	13	.	.	.	5259	
0.5	130	123	5171	3572	2303	3288	3824	1915	109	.	.	.	20433	
1.0	29	287	1832	2433	937	1882	4040	1927	251	.	.	.	14966	
1.5	.	97	222	821	359	343	1018	1527	135	.	.	.	4513	
2.0	.	10	17	82	82	35	116	256	75	.	.	.	673	
2.5	.	.	3	.	1	1	1	25	.	.	.	.	31
3.0	.	.	.	.	.	.	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	342	588	8685	8504	4392	6216	9416	7155	583	0	0	0	0	
TOTAL														
MEAN HS(M) = 0.9		LARGEST HS(M) = 2.9		MEAN TP(SEC) = 10.5		NO. OF CASES = 26825.								

HEIGHT(METERS)	PERIOD(SECONDS)												TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	439	5	1019	3560	1848	1178	285	32				8366	
0.50	681	92	1543	5124	4835	5990	3480	203	1			21347	
1.00	123	746	470	896	975	1836	2565	248				7859	
1.50		201	63	63	49	114	285	42	1			818	
2.00		8	5	1	1	3	8	3				29	
2.50												5	
3.00												0	
3.50												0	
4.00												0	
4.50												0	
5.00												0	
TOTAL	1243	1052	3105	9644	7708	9121	6623	528	2	0	0		
MEAN HS(M) = 0.7 LARGEST HS(M) = 2.7 MEAN TP(SEC) = 9.9 NO. OF CASES = 22819.													

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	835	.	.	.	.	.	.	.	.	.	.	835
0.50	0.99	1356	11	.	.	.	.	.	.	.	.	.	1367
1.00	1.49	97	32	.	1	.	.	.	.	.	.	.	130
1.50	1.99	.	1	.	.	.	.	.	.	.	.	.	1
2.00	2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.50	2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.00	3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.50	3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00	4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50	4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00	5.49	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL		2288	44	0	1	0	0	0	0	0	0	0	
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.6		MEAN TP(SEC) = 3.2		NO. OF CASES = 1366.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	894	.	.	.	.	.	.	.	.	.	.	894
0.50	739	.	.	.	.	.	.	.	.	.	.	739
1.00	13	.	.	.	.	.	.	.	.	.	.	13
1.50	0	.	.	.	.	.	.	.	.	.	.	0
2.00	0	.	.	.	.	.	.	.	.	.	.	0
2.50	0	.	.	.	.	.	.	.	.	.	.	0
3.00	0	.	.	.	.	.	.	.	.	.	.	0
3.50	0	.	.	.	.	.	.	.	.	.	.	0
4.00	0	.	.	.	.	.	.	.	.	.	.	0
4.50	0	.	.	.	.	.	.	.	.	.	.	0
5.00	0	.	.	.	.	.	.	.	.	.	.	0
5.50	0	.	.	.	.	.	.	.	.	.	.	0
6.00	0	.	.	.	.	.	.	.	.	.	.	0
6.50	0	.	.	.	.	.	.	.	.	.	.	0
7.00	0	.	.	.	.	.	.	.	.	.	.	0
7.50	0	.	.	.	.	.	.	.	.	.	.	0
8.00	0	.	.	.	.	.	.	.	.	.	.	0
8.50	0	.	.	.	.	.	.	.	.	.	.	0
9.00	0	.	.	.	.	.	.	.	.	.	.	0
9.50	0	.	.	.	.	.	.	.	.	.	.	0
10.00	0	.	.	.	.	.	.	.	.	.	.	0
10.50	0	.	.	.	.	.	.	.	.	.	.	0
11.00	0	.	.	.	.	.	.	.	.	.	.	0
11.50	0	.	.	.	.	.	.	.	.	.	.	0
12.00	0	.	.	.	.	.	.	.	.	.	.	0
12.50	0	.	.	.	.	.	.	.	.	.	.	0
13.00	0	.	.	.	.	.	.	.	.	.	.	0
13.50	0	.	.	.	.	.	.	.	.	.	.	0
14.00	0	.	.	.	.	.	.	.	.	.	.	0
14.50	0	.	.	.	.	.	.	.	.	.	.	0
15.00	0	.	.	.	.	.	.	.	.	.	.	0
15.50	0	.	.	.	.	.	.	.	.	.	.	0
16.00	0	.	.	.	.	.	.	.	.	.	.	0
16.50	0	.	.	.	.	.	.	.	.	.	.	0
17.00	0	.	.	.	.	.	.	.	.	.	.	0
17.50	0	.	.	.	.	.	.	.	.	.	.	0
18.00	0	.	.	.	.	.	.	.	.	.	.	0
18.50	0	.	.	.	.	.	.	.	.	.	.	0
19.00	0	.	.	.	.	.	.	.	.	.	.	0
19.50	0	.	.	.	.	.	.	.	.	.	.	0
20.00	0	.	.	.	.	.	.	.	.	.	.	0
20.50	0	.	.	.	.	.	.	.	.	.	.	0
21.00	0	.	.	.	.	.	.	.	.	.	.	0
21.50	0	.	.	.	.	.	.	.	.	.	.	0
22.00	0	.	.	.	.	.	.	.	.	.	.	0
22.50	0	.	.	.	.	.	.	.	.	.	.	0
23.00	0	.	.	.	.	.	.	.	.	.	.	0
23.50	0	.											

MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	0.0	0.9	0.0	0.0	0.0	0.0	0.6	0.7	0.5	0.5	0.7	0.8	0.7
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.0	1.1	1.0	0.9	0.8	0.8	0.6	0.5	0.5	0.6	0.9	1.1	

MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1950	1	1	1	1	1	1	1	1	1	1	1	1
1951	1	1	1	1	1	1	1	1	1	1	1	1
1952	1	1	1	1	1	1	1	1	1	1	1	1
1953	1	1	1	1	1	1	1	1	1	1	1	1
1954	1	1	1	1	1	1	1	1	1	1	1	1
1955	1	1	1	1	1	1	1	1	1	1	1	1
1956	1	1	1	1	1	1	1	1	1	1	1	1
1957	1	1	1	1	1	1	1	1	1	1	1	1
1958	1	1	1	1	1	1	1	1	1	1	1	1
1959	1	1	1	1	1	1	1	1	1	1	1	1
1960	1	1	1	1	1	1	1	1	1	1	1	1
1961	1	1	1	1	1	1	1	1	1	1	1	1
1962	1	1	1	1	1	1	1	1	1	1	1	1
1963	1	1	1	1	1	1	1	1	1	1	1	1
1964	1	1	1	1	1	1	1	1	1	1	1	1
1965	1	1	1	1	1	1	1	1	1	1	1	1
1966	1	1	1	1	1	1	1	1	1	1	1	1
1967	1	1	1	1	1	1	1	1	1	1	1	1
1968	1	1	1	1	1	1	1	1	1	1	1	1
1969	1	1	1	1	1	1	1	1	1	1	1	1
1970	1	1	1	1	1	1	1	1	1	1	1	1
1971	1	1	1	1	1	1	1	1	1	1	1	1
1972	1	1	1	1	1	1	1	1	1	1	1	1
1973	1	1	1	1	1	1	1	1	1	1	1	1
1974	1	1	1	1	1	1	1	1	1	1	1	1
1975	1	1	1	1	1	1	1	1	1	1	1	1
1976	1	1	1	1	1	1	1	1	1	1	1	1
1977	1	1	1	1	1	1	1	1	1	1	1	1
1978	1	1	1	1	1	1	1	1	1	1	1	1
1979	1	1	1	1	1	1	1	1	1	1	1	1
1980	1	1	1	1	1	1	1	1	1	1	1	1
1981	1	1	1	1	1	1	1	1	1	1	1	1
1982	1	1	1	1	1	1	1	1	1	1	1	1
1983	1	1	1	1	1	1	1	1	1	1	1	1
1984	1	1	1	1	1	1	1	1	1	1	1	1
1985	1	1	1	1	1	1	1	1	1	1	1	1
1986	1	1	1	1	1	1	1	1	1	1	1	1
1987	1	1	1	1	1	1	1	1	1	1	1	1
1988	1	1	1	1	1	1	1	1	1	1	1	1
1989	1	1	1	1	1	1	1	1	1	1	1	1

20 YR. STATISTICS FOR HIS STATION 21 (34.00N 119.12W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.8
MEAN PEAK WAVE PERIOD (SECONDS) =	9.5
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	3.2
LARGEST HS (METERS) =	3.8
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	11.1
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	187.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	59021612

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.2	18.2-22.3	22.3- LONGER	
0.0	622	.	.	.	.	.	.	.	.	.	.	622
0.1	518	.	.	.	.	.	.	.	.	.	.	518
0.2	.	3	.	.	.	1	.	.	.	.	.	4
0.3	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	0
1.1	.	.	.	.	.	.	.	.	.	.	.	0
1.2	.	.	.	.	.	.	.	.	.	.	.	0
1.3	.	.	.	.	.	.	.	.	.	.	.	0
1.4	.	.	.	.	.	.	.	.	.	.	.	0
1.5	.	.	.	.	.	.	.	.	.	.	.	0
1.6	.	.	.	.	.	.	.	.	.	.	.	0
1.7	.	.	.	.	.	.	.	.	.	.	.	0
1.8	.	.	.	.	.	.	.	.	.	.	.	0
1.9	.	.	.	.	.	.	.	.	.	.	.	0
2.0	.	.	.	.	.	.	.	.	.	.	.	0
2.1	.	.	.	.	.	.	.	.	.	.	.	0
2.2	.	.	.	.	.	.	.	.	.	.	.	0
2.3	.	.	.	.	.	.	.	.	.	.	.	0
2.4	.	.	.	.	.	.	.	.	.	.	.	0
2.5	.	.	.	.	.	.	.	.	.	.	.	0
2.6	.	.	.	.	.	.	.	.	.	.	.	0
2.7	.	.	.	.	.	.	.	.	.	.	.	0
2.8	.	.	.	.	.	.	.	.	.	.	.	0
2.9	.	.	.	.	.	.	.	.	.	.	.	0
3.0	.	.	.	.	.	.	.	.	.	.	.	0
3.1	.	.	.	.	.	.	.	.	.	.	.	0
3.2	.	.	.	.	.	.	.	.	.	.	.	0
3.3	.	.	.	.	.	.	.	.	.	.	.	0
3.4	.	.	.	.	.	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	.	.	.	.	.	0
3.6	.	.	.	.	.	.	.	.	.	.	.	0
3.7	.	.	.	.	.	.	.	.	.	.	.	0
3.8	.	.	.	.	.	.	.	.	.	.	.	0
3.9	.	.	.	.	.	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	.	.	.	.	.	0
4.1	.	.	.	.	.	.	.	.	.	.	.	0
4.2	.	.	.	.	.	.	.	.	.	.	.	0
4.3	.	.	.	.	.	.	.	.	.	.	.	0
4.4	.	.	.	.	.	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	.	0
4.6	.	.	.	.	.	.	.	.	.	.	.	0
4.7	.	.	.	.	.	.	.	.	.	.	.	0
4.8	.	.	.	.	.	.	.	.	.	.	.	0
4.9									

[illegible][illegible]

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	23											23
0.5	1		10	1									12
1.0	1		32	15									47
1.5	1		17	33				1					71
2.0	1			32									32
2.5	1			10									10
3.0	1			8									8
3.5	1												0
4.0	1												0
4.5	1												0
5.0	1												0
5.5	1												0
6.0	1												0
TOTAL		24	59	119	0	0	0	1	0	0	0	0	
MEAN HS(M) = 1.5		LARGEST HS(M) = 3.3		MEAN TP(SEC) = 5.8		NO. OF CASES = 122.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
10.0	11			1	.	.	.	.	.	.	.	11
9.5	10		11	15	.	.	.	.	.	.	.	10
9.0	9		23	8	1	.	.	.	.	.	.	9
8.5	8		23	27	.	.	.	.	.	.	.	8
8.0	7		1	17	.	1	.	.	.	.	.	7
7.5	6		.	1	.	.	.	.	.	.	.	6
7.0	5		.	.	.	.	.	.	.	.	.	5
6.5	4		.	.	.	.	.	.	.	.	.	4
6.0	3		.	.	.	.	.	.	.	.	.	3
5.5	2		.	.	.	.	.	.	.	.	.	2
5.0	1		.	.	.	.	.	.	.	.	.	1
4.5	0		.	.	.	.	.	.	.	.	.	0
4.0	0		.	.	.	.	.	.	.	.	.	0
3.5	0		.	.	.	.	.	.	.	.	.	0
3.0	0		.	.	.	.	.	.	.	.	.	0
2.5	0		.	.	.	.	.	.	.	.	.	0
2.0	0		.	.	.	.	.	.	.	.	.	0
1.5	0		.	.	.	.	.	.	.	.	.	0
1.0	0		.	.	.	.	.	.	.	.	.	0
0.5	0		.	.	.	.	.	.	.	.	.	0
0.0	0		.	.	.	.	.	.	.	.	.	0
TOTAL		10	40	69	1	1	0	1	0	0	0	76	
MEAN HS(M) = 1.3		LARGEST HS(M) = 2.7		MEAN TP(SEC) = 6.1		NO. OF CASES = 76.							

[illegible]

STATION 22 34.00N 119.32W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	15		11	23		5						49
0.5-0.99		5	5	23		3						38
1.0-1.49			30	1								17
1.5-1.99			8	29			1					33
2.0-2.49				15	1							16
2.5-2.99				1	3							2
3.0-3.49						1						6
3.5-3.99												1
4.0-4.49												0
4.5-4.99												0
5.00+												0
TOTAL	15	13	59	92	5	12	1	3	0	0	0	

MEAN HS(M) = 1.4 LARGEST HS(M) = 4.0 MEAN TP(SEC) = 7.8 NO. OF CASES = 124.

STATION 22 34.00N 119.32W AZIMUTH(DEGREES) = 202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	13		3	15	1	3						32
0.5-0.99	1	5	15	49	1	6						74
1.0-1.49		11	17	8	1	1						44
1.5-1.99			47	20			1					70
2.0-2.49			23	59				5				87
2.5-2.99				11								11
3.0-3.49				10	3	6						17
3.5-3.99												3
4.0-4.49												0
4.5-4.99												0
5.00+												0
TOTAL	14	16	105	172	7	16	2	6	0	0	0	

MEAN HS(M) = 1.5 LARGEST HS(M) = 3.6 MEAN TP(SEC) = 8.1 NO. OF CASES = 208.

STATION 22 34.00N 119.32W AZIMUTH(DEGREES) = 225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	30	1	39	30	13	6						106
0.5-0.99	8	11	37	23	15	6						98
1.0-1.49	1	46	183	47	155	15						315
1.5-1.99			225	68	155	13						338
2.0-2.49			78	109	15	11						200
2.5-2.99			3	44	3							60
3.0-3.49				3								3
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.00+												0
TOTAL	39	59	565	324	61	45	39	7	1	0	0	

MEAN HS(M) = 1.5 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 7.9 NO. OF CASES = 679.

STATION 22 34.00N 119.32W AZIMUTH(DEGREES) = 247.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	78	29	58	70	13	10						267
0.5-0.99	30	111	270	198	80	128						578
1.0-1.49	6	97	463	385	111	184	6					1541
1.5-1.99		5	287	180	88	68	242					813
2.0-2.49			44	65	51	6	49	8				308
2.5-2.99				1			1					2
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.00+												0
TOTAL	114	243	1122	865	343	396	519	300	7	0	0	

MEAN HS(M) = 1.2 LARGEST HS(M) = 3.0 MEAN TP(SEC) = 9.2 NO. OF CASES = 2298.

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	205	37	484	650	379	342	355	212	8	.	.	2672
0.1	0.99	135	104	2640	1652	1336	2085	3223	2181	.	.	.	13479
0.2	1.49	30	85	1273	2046	571	1127	2419	2614	123	.	.	10363
0.3	1.99	.	25	124	597	313	236	660	768	198	.	.	2791
0.4	2.49	.	1	.	23	41	20	68	109	68	.	.	285
0.5	2.99	10	23	.	.	10
0.6	3.49	0
0.7	3.99	0
0.8	4.49	0
0.9	4.99	0
TOTAL		370	252	4521	4968	2640	3810	6725	5894	420	0	0	0
MEAN HS(M) = 1.0		LARGEST HS(M) = 2.8		MEAN TP(SEC) = 10.9		NO. OF CASES = 17311.							

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	451	8	1226	3596	1818	1432	414	54					8999	
0.5	770	124	4296	8124	6194	6978	4551	373					31411	
1.0	148	549	1718	2032	1582	2542	3311	326					12211	
1.5		145	68	321	107	203	342	73					1259	
2.0		15		5	11	3	6						43	
2.5													0	
3.0													0	
3.5													0	
4.0													0	
4.5													0	
5.0													0	
5.5													0	
6.0													0	
6.5													0	
7.0													0	
7.5													0	
8.0													0	
8.5													0	
9.0													0	
9.5													0	
10.0													0	
10.5													0	
11.0													0	
11.5													0	
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13.5													0	
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14.5													0	
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17.5													0	
18.0													0	
18.5													0	
19.0													0	
19.5													0	
20.0													0	
20.5													0	
21.0													0	
21.5													0	
22.0														

[illegible]

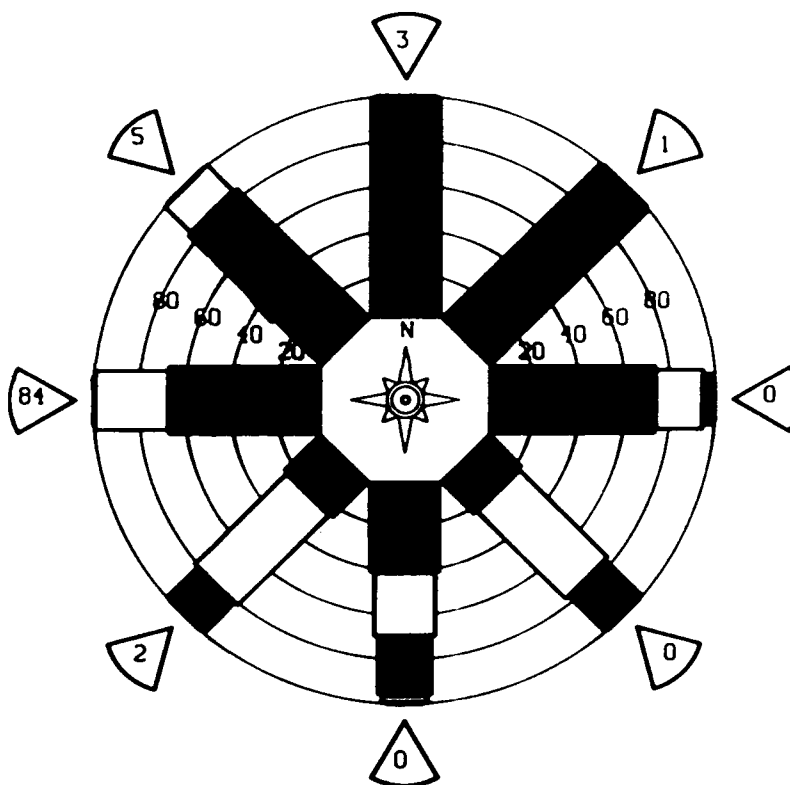
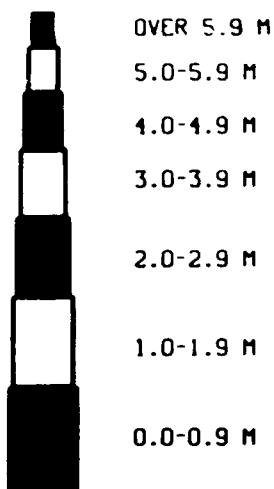
HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	746												746
0.1	1401												1401
0.2	39												39
0.3													
0.4													
0.5													
0.6													
0.7													
0.8													
0.9													
1.0													
1.1													
1.2													
1.3													
1.4													
1.5													
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3.3													
3.4													
3.5													
3.6													
3.7													
3.8													
3.9													
4.0													
4.1													
4.2													
4.3													
4.4													
4.5													
4.6													
4.7													

STATION 22 34.00N 119.32W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)												TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0-0.9	489	8	182	438	221	179	77	27				1621	
1.0-1.9	663	44	728	1007	762	920	787	261				5184	
2.0-2.9	40	111	369	452	228	388	599	299	12			2506	
3.0-3.9		23	90	114	52	52	114	94	20			546	
4.0-4.9		2	22	29	12	1	13	21	2			104	
5.0-5.9			1	8				1				11	
6.0-6.9				1								1	
7.0-7.9												0	
8.0-8.9												0	
9.0-9.9												0	
10.0-10.9												0	
11.0-11.9												0	
12.0-12.9												0	
13.0-13.9												0	
14.0-14.9												0	
15.0-15.9												0	
16.0-16.9												0	
17.0-17.9												0	
18.0-18.9												0	
19.0-19.9												0	
20.0-20.9												0	
21.0-21.9												0	
22.0-22.9												0	
23.0-23.9												0	
24.0-24.9												0	
25.0-25.9												0	
26.0-26.9												0	
27.0-27.9												0	
28.0-28.9												0	
29.0-29.9												0	
30.0-30.9												0	
31.0-31.9												0	
32.0-32.9												0	
33.0-33.9												0	
34.0-34.9												0	
35.0-35.9												0	
36.0-36.9												0	
37.0-37.9												0	
38.0-38.9												0	
39.0-39.9												0	
40.0-40.9												0	
41.0-41.9												0	
42.0-42.9												0	
43.0-43.9												0	
44.0-44.9												0	
45.0-45.9												0	
46.0-46.9												0	
47.0-47.9												0	
48.0-48.9												0	
49.0-49.9												0	
50.0-50.9												0	
51.0-51.9												0	
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67.0-67.9												0	
68.0-68.9												0	
69.0-69.9												0	
70.0-70.9												0	
71.0-71.9												0	
72.0-72.9												0	
73.0-73.9												0	
74.0-74.9												0	
75.0-75.9												0	
76.0-76.9												0	
77.0-77.9												0	
78.0-78.9												0	
79.0-79.9												0	
80.0-80.9												0	
81.0-81.9												0	
82.0-82.9												0	
83.0-83.9												0	
84.0-84.9												0	
85.0-85.9												0	
86.0-86.9												0	
87.0-87.9												0	
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89.0-89.9												0	
90.0-90.9												0	
91.0-91.9												0	
92.0-92.9												0	
93.0-93.9												0	
94.0-94.9												0	
95.0-95.9												0	
96.0-96.9												0	
97.0-97.9												0	
98.0-98.9												0	
99.0-99.9												0	
TOTAL	1192	188	1392	2049	1275	1543	1590	703	41	0	0		
MEAN HS(M) =	0.8	LARGEST HS(M) = 4.0		MEAN TP(SEC) = 9.3		TOTAL CASES = 58440.							

MEAN HS(M) = 0.8 LARGEST HS(M) = 4.0 MEAN TP(SEC) = 9.3 TOTAL CASES = 58440.

STATION 22
 34.00N, 119.32W
 58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 22 (34.00N 119.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	1.0	1.0	1.0	0.9	0.9	0.8	0.7	0.6	0.6	0.6	0.8	1.0	

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 22 (34.00N 119.32W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1987	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1985	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1984	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1983	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1982	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1981	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1979	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1978	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1977	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1976	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

20 YR. STATISTICS FOR WIS STATION 22 (34.00N 119.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	0.8
MEAN PEAK WAVE PERIOD (SECONDS) =	9.3
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	292.5
STANDARD DEVIATION OF HS (METERS) =	0.4
STANDARD DEVIATION OF TP (SECONDS) =	3.1
LARGEST HS (METERS) =	4.0
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	11.1
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	184.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	59021612

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	691	.	.	.	.	.	.	.	.	.	.	691
0.5	302	.	.	.	.	.	.	.	.	.	.	302
1.0	.	1	.	.	.	.	.	.	.	.	.	1
1.5	.	6	.	.	.	.	.	.	.	.	.	6
2.0	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.
5.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	993	7	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 2.7 NO. OF CASES = 586.												

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 22.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	419	.	.	.	.	.	.	.	.	.	.	419
0.5	165	.	.	.	.	.	.	.	.	.	.	165
1.0	.	3	.	.	.	.	.	.	.	.	.	3
1.5	.	3	.	.	.	.	.	.	.	.	.	3
2.0	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.
5.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	584	8	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 2.3 MEAN TP(SEC) = 2.6 NO. OF CASES = 347.												

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 45.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	338	.	.	.	.	.	.	.	.	.	.	338
0.5	239	.	.	.	.	.	.	.	.	.	.	239
1.0	.	3	.	.	.	.	.	.	.	.	.	3
1.5	.	1	.	.	.	.	.	.	.	.	.	1
2.0	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.
5.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	583	4	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 2.0 MEAN TP(SEC) = 2.7 NO. OF CASES = 345.												

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 67.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	100	.	.	.	.	.	.	.	.	.	.	100
0.5	120	.	.	.	.	.	.	.	.	.	.	120
1.0	200	.	.	.	.	.	.	.	.	.	.	200
1.5	.	.	.	.	.	.	.	.	.	.	.	.
2.0	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.
5.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	253	0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.6 LARGEST HS(M) = 1.7 MEAN TP(SEC) = 2.8 NO. OF CASES = 149.												

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	0												0	
0.1	0												0	
0.2	1												1	
0.3	0												0	
0.4	0												0	
0.5	0												0	
0.6	0												0	
0.7	0												0	
0.8	0												0	
0.9	0												0	
1.0	0												0	
1.1	0												0	
1.2	0												0	
1.3	0												0	
1.4	0												0	
1.5	0												0	
1.6	0												0	
1.7	0												0	
1.8	0												0	
1.9	0												0	
2.0	0												0	
2.1	0												0	
2.2	0												0	
2.3	0												0	
2.4	0												0	
2.5	0												0	
2.6	0												0	
2.7	0												0	
2.8	0												0	
2.9	0												0	
3.0	0												0	
TOTAL	31	0	0	0	0	0	0	0	0	0	0	0	19	
MEAN HS(M) = 0.2		LARGEST HS(M) = 0.5		MEAN TP(SEC) = 1.8		NO. OF CASES = 19.								

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	0												0
1	1												0
2	2												0
3	3												0
4	4												0
5	5												0
6	6												0
7	7												0
8	8												0
9	9												0
10	10												0
11	11												0
12	12												0
13	13												0
14	14												0
15	15												0
16	16												0
17	17												0
18	18												0
19	19												0
20	20												0
21	21												0
22	22												0
23	23												0
24	24												0
25	25												0
TOTAL		25	0	4	0	0	0	0	0	0	0	0	18
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.8		MEAN TP(SEC) = 2.9		NO. OF CASES = 18.							

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	5	.	.	.	.	.	.	.	.	.	.	.	5	
0.1	.	.	.	11	.	1	.	.	.	.	.	.	12	
0.2	.	.	.	8	.	.	.	.	.	.	.	.	10	
0.3	.	.	.	1	3	.	.	.	.	.	.	.	10	
0.4	.	.	.	.	.	.	.	.	.	.	.	.	10	
0.5	.	.	.	.	.	.	.	.	.	.	.	.	10	
0.6	.	.	.	.	.	.	.	.	.	.	.	.	10	
0.7	.	.	.	.	.	.	.	.	.	.	.	.	10	
0.8	.	.	.	.	.	.	.	.	.	.	.	.	10	
0.9	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.0	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.1	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.2	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.3	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.4	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.5	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.6	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.7	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.8	.	.	.	.	.	.	.	.	.	.	.	.	10	
1.9	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.0	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.1	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.2	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.3	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.4	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.5	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.6	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.7	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.8	.	.	.	.	.	.	.	.	.	.	.	.	10	
2.9	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.0	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.1	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.2	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.3	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.4	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.5	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.6	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.7	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.8	.	.	.	.	.	.	.	.	.	.	.	.	10	
3.9	.	.	.	.	.	.	.	.	.	.	.	.	10	
4.0	.	.	.	.	.	.	.	.	.	.	.	.	10	
4.1	.	.	.	.	.	.	.	.	.	.	.	.	10	
4.2	.	.	.	.	.	.	.	.	.	.	.	.	10	
4.3	.	.												

[illegible]

HEIGHT(METERS)				PERIOD(SECONDS)										TOTAL	
				<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	.	.	.	8	.	13	27	3	.	.	.	.	.	.	48
0.1	.	.	.	.	1	5	5	1	.	.	.	.	.	.	17
0.2	.	.	.	.	.	5	17	1	3	.	5	.	.	.	23
0.3	.	.	.	.	.	.	3	1	1	.	.	.	.	.	31
0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	9
0.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	1	32	58	13	4	0	8	0	0	0	0	0	0	78
MEAN HS(M) = 1.0				LARGEST HS(M) = 2.2				MEAN TP(SEC) = 8.3				NO. OF CASES = 78.			

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	37				27	6	5	.	.	.	.	.	67	
0.1	1		3	3	10	8	3	.	4	.	.	.	37	
0.2				3	11		3	3	1	1	.	.	34	
0.3													27	
0.4													00	
0.5													00	
0.6													00	
0.7													00	
0.8													00	
0.9													00	
1.0													00	
TOTAL		39	4	20	63	14	16	3	5	1	0	0		
MEAN HS(M) = 0.8		LARGEST HS(M) = 1.9		MEAN TP(SEC) = 7.5		NO. OF CASES = 104.								

[illegible]

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	154	462	2455	4038	1380	651	138	35		6		9319
0.5	66	917	8771	8300	6820	8317	3538	537		10		37311
1.0	10	328	3502	2609	2327	5847	8080	2340		113		25160
1.5		47	511	983	400	1244	5054	4271		273		12806
2.0			15	169	118	95	807	2927		439		4576
2.5				8	5	17	82	658		456		1227
3.0							6	97		114		217
3.5								6		49		55
4.0										1		1
4.5												0
5.0												0
5.5												0
6.0												0
TOTAL	230	1759	15255	16107	11050	16191	17705	10871	1479	25	0	

MEAN HS(M) = 1.0 LARGEST HS(M) = 4.0 MEAN TP(SEC) = 10.5 NO. OF CASES = 53008.

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	222		219	669	87	6						1203
0.5	253	30	244	1074	191	17						1800
1.0	44	90	92	184	88	30						528
1.5		20	5	13	13	3						87
2.0												0
2.5												0
3.0												0
3.5												0
4.0												0
4.5												0
5.0												0
5.5												0
6.0												0
TOTAL	519	140	560	1941	379	88	3	2	0	0	0	

MEAN HS(M) = 0.6 LARGEST HS(M) = 2.3 MEAN TP(SEC) = 7.7 NO. OF CASES = 2131.

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

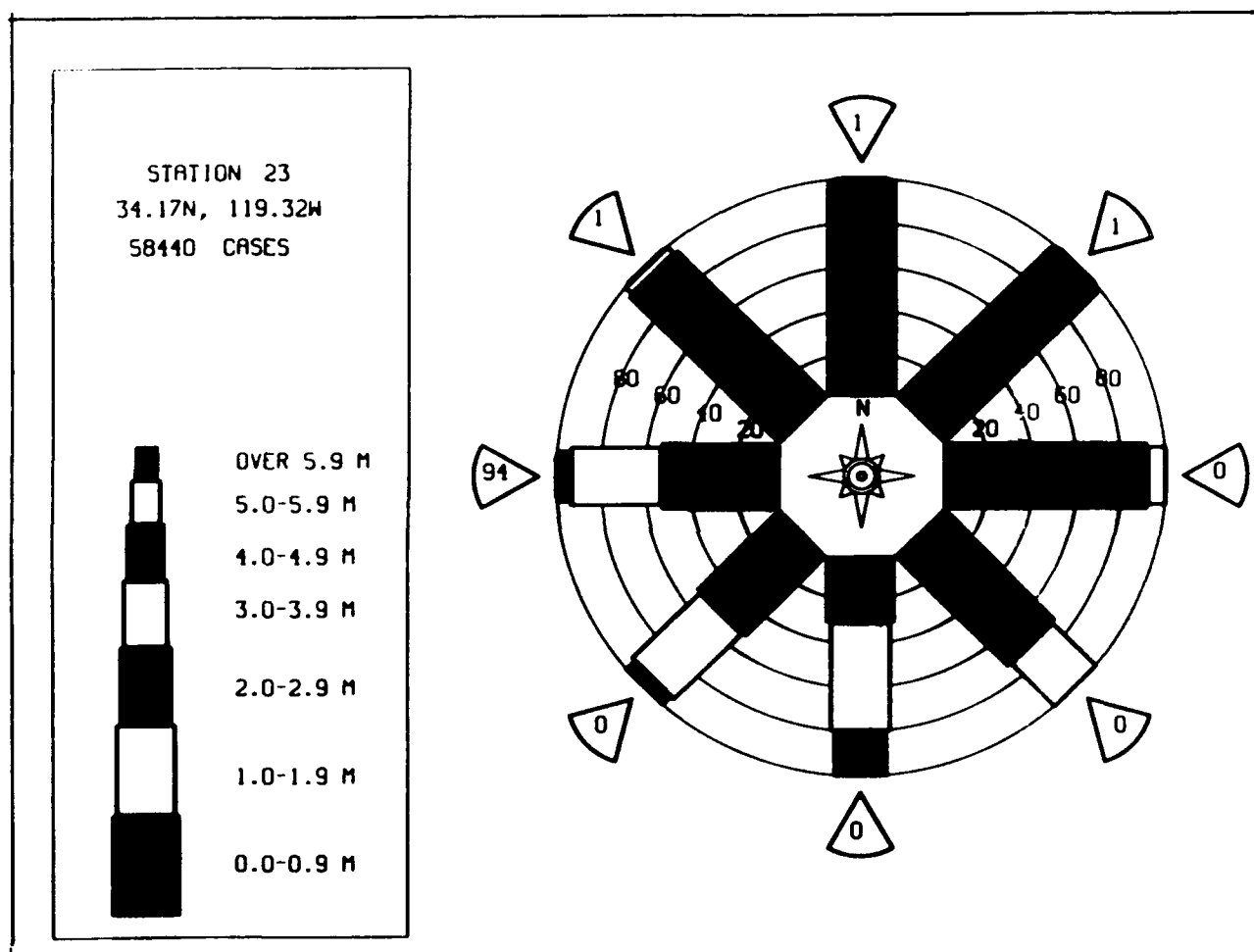
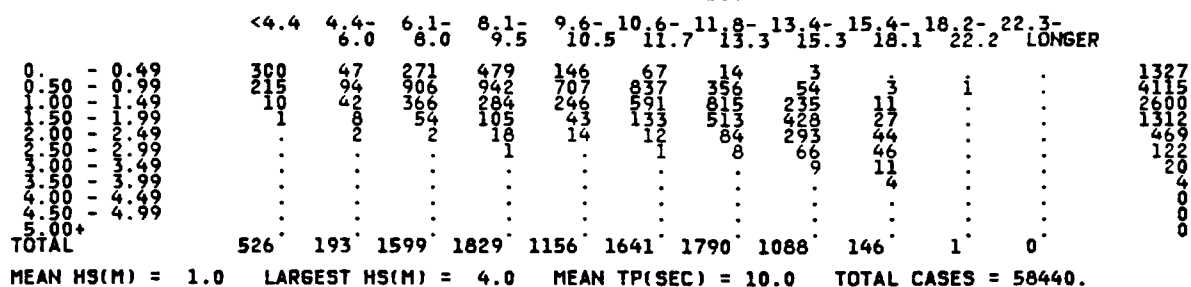
HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	412											412
0.5	526											526
1.0	25											25
1.5												0
2.0												0
2.5												0
3.0												0
3.5												0
4.0												0
4.5												0
5.0												0
5.5												0
6.0												0
TOTAL	996	10	0	0	0	1	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 3.0 NO. OF CASES = 590.

STATION 23 34.17N 119.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	453											453
0.5	361											361
1.0	3											3
1.5		1										1
2.0												0
2.5												0
3.0												0
3.5												0
4.0												0
4.5												0
5.0												0
5.5												0
6.0												0
TOTAL	817	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.4 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 2.9 NO. OF CASES = 479.

TOTAL

MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 23 (34.17N 119.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1957	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1958	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1959	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1960	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1961	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1962	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1963	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1964	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1965	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1966	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1967	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1968	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1969	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1970	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1971	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1972	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1973	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1974	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
1975	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9
MEAN	1.4	1.4	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.8	1.1	1.5	0.9

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 23 (34.17N 119.32W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1957	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1958	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1959	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1960	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1961	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1962	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1963	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1964	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1965	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1966	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1967	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1968	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1969	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1970	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1971	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1972	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1973	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1974	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
1975	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

20 YR. STATISTICS FOR WIS STATION 23 (34.17N 119.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.0
MEAN PEAK WAVE PERIOD (SECONDS) =	10.0
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.5
STANDARD DEVIATION OF TP (SECONDS) =	3.0
LARGEST HS (METERS) =	4.0
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	270.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121318

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	181	.	.	.	.	.	.	.	.	.	.	181
0.1	285	.	.	.	.	.	.	.	.	.	.	285
0.2	8	307	.	.	.	.	.	.	.	.	.	315
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	474	8	0	0	0	0	0	0	0	0	0	482

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 3.1 NO. OF CASES = 283.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 22.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	177	.	.	.	.	.	.	.	.	.	.	177
0.1	176	.	.	.	.	.	.	.	.	.	.	176
0.2	1	.	.	.	.	.	.	.	.	.	.	1
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	354	0	0	0	0	0	0	0	0	0	0	354

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.8 NO. OF CASES = 208.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 45.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	171	.	.	.	.	.	.	.	.	.	.	171
0.1	145	.	.	.	.	.	.	.	.	.	.	145
0.2	1	.	.	.	.	.	.	.	.	.	.	1
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	316	1	0	0	0	0	0	0	0	0	0	317

MEAN HS(M) = 0.4 LARGEST HS(M) = 1.8 MEAN TP(SEC) = 2.7 NO. OF CASES = 186.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 67.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	35	.	.	.	.	.	.	.	.	.	.	35
0.1	71	.	.	.	.	.	.	.	.	.	.	71
0.2	1	.	.	.	.	.	.	.	.	.	.	1
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	108	0	0	0	0	0	0	0	0	0	0	108

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.5 MEAN TP(SEC) = 2.9 NO. OF CASES = 65.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 90.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.49	6	.	.	.	.	.	.	.	.	.	.	6
0.50	17	.	.	1	.	.	.	.	.	.	.	17
0.51
0.52
0.53
0.54
0.55
0.56
0.57
0.58
0.59
0.60
0.61
0.62
0.63
0.64
0.65
0.66
0.67
0.68
0.69
0.70
TOTAL	23	0	0	1	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.6 LARGEST HS(M) = 1.4 MEAN TP(SEC) = 3.1 NO. OF CASES = 15.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 112.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.49	13	.	.	.	.	.	.	.	.	.	.	13
0.50	5	.	3	.	.	.	.	.	.	.	.	5
0.51
0.52
0.53
0.54
0.55
0.56
0.57
0.58
0.59
0.60
0.61
0.62
0.63
0.64
0.65
0.66
0.67
0.68
0.69
0.70
TOTAL	18	0	4	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.6 MEAN TP(SEC) = 3.2 NO. OF CASES = 14.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 135.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.49	8	.	.	.	.	.	.	.	.	.	.	8
0.50	.	.	5	8	.	.	.	.	.	.	.	5
0.51	.	.	1	1	.	.	.	.	.	.	.	1
0.52
0.53
0.54
0.55
0.56
0.57
0.58
0.59
0.60
0.61
0.62
0.63
0.64
0.65
0.66
0.67
0.68
0.69
0.70
TOTAL	8	0	7	9	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.1 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 6.0 NO. OF CASES = 16.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 157.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.49	3	.	1	1	.	.	.	.	.	.	.	3
0.50	.	3	5	5	3	.	.	.	.	.	.	5
0.51	.	.	.	1	1	.	.	.	.	.	.	1
0.52
0.53
0.54
0.55
0.56
0.57
0.58
0.59
0.60
0.61
0.62
0.63
0.64
0.65
0.66
0.67
0.68
0.69
0.70
TOTAL	6	3	9	7	4	0	0	0	0	0	0	0

MEAN HS(M) = 1.3 LARGEST HS(M) = 2.5 MEAN TP(SEC) = 6.8 NO. OF CASES = 20.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.2 LARGEST HS(M) = 2.1 MEAN TP(SEC) = 8.0 NO. OF CASES = 18.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 202.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.3 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 9.6 NO. OF CASES = 12.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 225.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 1.0 LARGEST HS(M) = 1.9 MEAN TP(SEC) = 7.2 NO. OF CASES = 31.

STATION 24 34.17N 119.52W AZIMUTH(DEGREES) = 247.3
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.9 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 7.8 NO. OF CASES = 59.

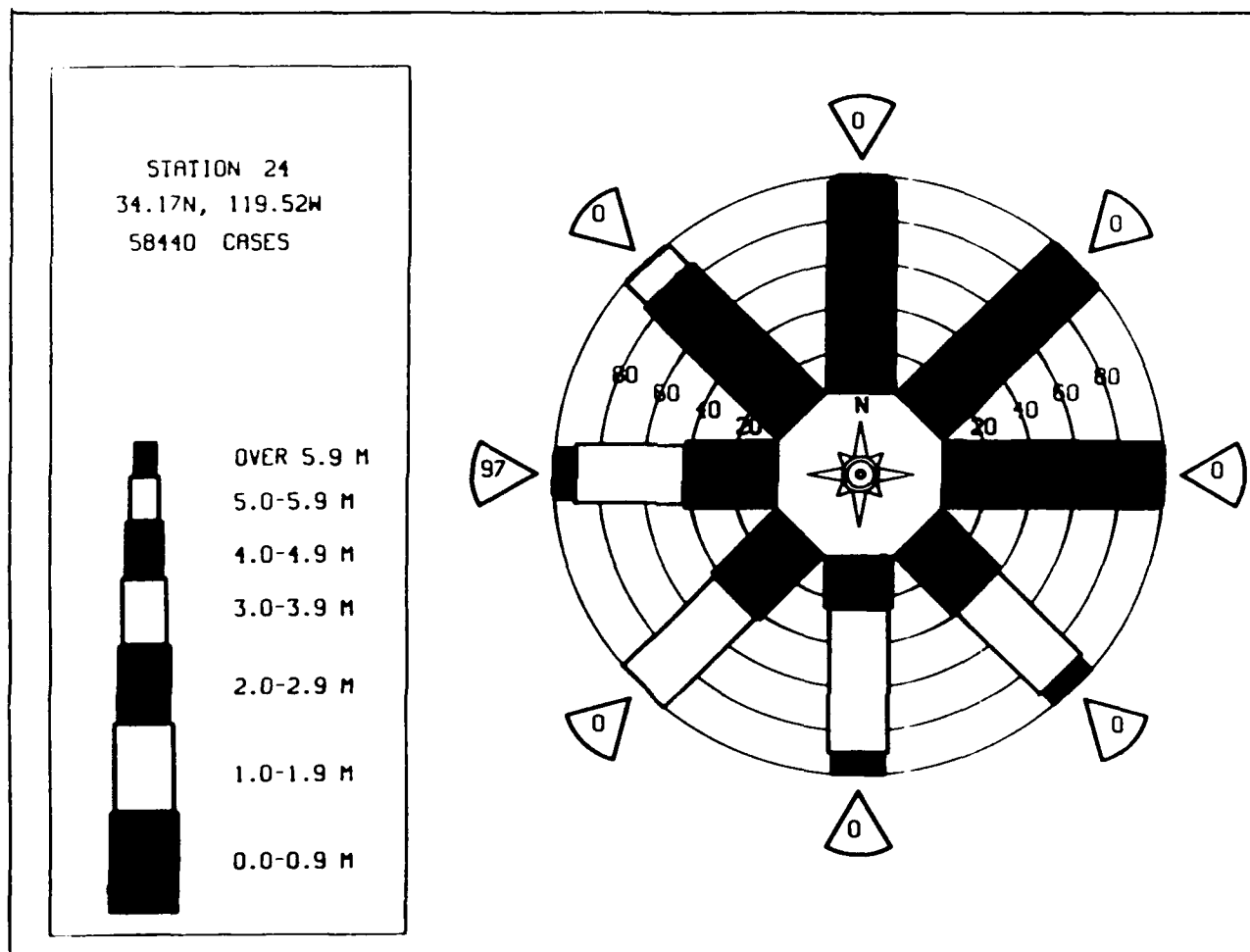
HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.00	65	111	415	554	130	99	22	1					1397	
0.05	18	278	229	1894	1178	1131	484	123					7410	
0.10		46	1955	1310	1045	1841	1774	609					8622	
0.15			419	886	561	2902	2902	1788					8218	
0.20			15	313	143	1550	1391	1909					3222	
0.25				1	32	374	236	884					1370	
0.30					3	49	32	135					220	
0.35								15					32	
0.40													0	
0.45													0	
0.50													0	
0.55													0	
0.60													0	
0.65													0	
0.70													0	
0.75													0	
0.80													0	
0.85													0	
0.90													0	
0.95													0	
1.00													0	
TOTAL	83	437	5096	4990	3092	5044	6841	5464	544	0	0			
MEAN HS(M) = 1.4		LARGEST HS(M) = 3.8		MEAN TP(SEC) = 10.8		NO. OF CASES = 18476.								

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	100		114	1208	2380	366	143	18	8				4337	
0.1	112		573	922	1060	522	383	985					27408	
0.2	27		243	3030	3386	433	617	4231	439				21674	
0.3			35	544	823	634	217	1555	936				9066	
0.4				49	184	70	232	1584	679	2			2813	
0.5					15	22	1	128	195	15			378	
0.6					3			1	27	5			36	
0.7													0	
0.8													0	
0.9													0	
1.0													0	
TOTAL		239	968	10753	17396	10649	12609	10802	2432	64	0	0		
MEAN HS(M) = 1.1		LARGEST HS(M) = 3.4		MEAN TP(SEC) = 9.9		NO. OF CASES = 38533.								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	179	.	1	.	.	.	.	.	.	.	.	179
0.1	0	229	.	.	.	.	.	.	.	.	.	.	230
0.2	0	229	.	.	.	.	.	.	.	.	.	.	230
0.3	0	229	.	.	.	.	.	.	.	.	.	.	230
0.4	0	229	.	.	.	.	.	.	.	.	.	.	230
0.5	0	229	.	.	.	.	.	.	.	.	.	.	230
0.6	0	229	.	.	.	.	.	.	.	.	.	.	230
0.7	0	229	.	.	.	.	.	.	.	.	.	.	230
0.8	0	229	.	.	.	.	.	.	.	.	.	.	230
0.9	0	229	.	.	.	.	.	.	.	.	.	.	230
1.0	0	229	.	.	.	.	.	.	.	.	.	.	230
1.1	0	229	.	.	.	.	.	.	.	.	.	.	230
1.2	0	229	.	.	.	.	.	.	.	.	.	.	230
1.3	0	229	.	.	.	.	.	.	.	.	.	.	230
1.4	0	229	.	.	.	.	.	.	.	.	.	.	230
1.5	0	229	.	.	.	.	.	.	.	.	.	.	230
1.6	0	229	.	.	.	.	.	.	.	.	.	.	230
1.7	0	229	.	.	.	.	.	.	.	.	.	.	230
1.8	0	229	.	.	.	.	.	.	.	.	.	.	230
1.9	0	229	.	.	.	.	.	.	.	.	.	.	230
2.0	0	229	.	.	.	.	.	.	.	.	.	.	230
2.1	0	229	.	.	.	.	.	.	.	.	.	.	230
2.2	0	229	.	.	.	.	.	.	.	.	.	.	230
2.3	0	229	.	.	.	.	.	.	.	.	.	.	230
2.4	0	229	.	.	.	.	.	.	.	.	.	.	230
2.5	0	229	.	.	.	.	.	.	.	.	.	.	230
2.6	0	229	.	.	.	.	.	.	.	.	.	.	230
2.7	0	229	.	.	.	.	.	.	.	.	.	.	230
2.8	0	229	.	.	.	.	.	.	.	.	.	.	230
2.9	0	229	.	.	.	.	.	.	.	.	.	.	230
3.0	0	229	.	.	.	.	.	.	.	.	.	.	230
3.1	0	229	.	.	.	.	.	.	.	.	.	.	230
3.2	0	229	.	.	.	.	.	.	.	.	.	.	230
3.3	0	229	.	.	.	.	.	.	.	.	.	.	230
3.4	0	229	.	.	.	.	.	.	.	.	.	.	230
3.5	0	229	.	.	.	.	.	.	.	.	.	.	230
3.6	0	229	.	.	.	.	.	.	.	.	.	.	230
3.7	0	229	.	.	.	.	.	.	.	.	.	.	230
3.8	0	229	.	.	.	.	.	.	.	.	.	.	230
3.9	0	229	.	.	.	.	.	.	.	.	.	.	230
4.0	0	229	.	.	.	.	.	.	.	.	.	.	230
4.1	0	229	.	.	.	.	.	.	.	.	.	.	230
4.2	0	229	.	.	.								

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	147	.	.	.	.	.	.	.	.	.	.	.	147
0.1	242	.	.	.	.	.	.	.	.	.	.	.	242
0.2	152	.	.	.	.	.	.	.	.	.	.	.	152
0.3	100	.	.	.	.	.	.	.	.	.	.	.	100
0.4	100	.	.	.	.	.	.	.	.	.	.	.	100
0.5	100	.	.	.	.	.	.	.	.	.	.	.	100
0.6	100	.	.	.	.	.	.	.	.	.	.	.	100
0.7	100	.	.	.	.	.	.	.	.	.	.	.	100
0.8	100	.	.	.	.	.	.	.	.	.	.	.	100
0.9	100	.	.	.	.	.	.	.	.	.	.	.	100
1.0	100	.	.	.	.	.	.	.	.	.	.	.	100
1.1	100	.	.	.	.	.	.	.	.	.	.	.	100
1.2	100	.	.	.	.	.	.	.	.	.	.	.	100
1.3	100	.	.	.	.	.	.	.	.	.	.	.	100
1.4	100	.	.	.	.	.	.	.	.	.	.	.	100
1.5	100	.	.	.	.	.	.	.	.	.	.	.	100
1.6	100	.	.	.	.	.	.	.	.	.	.	.	100
1.7	100	.	.	.	.	.	.	.	.	.	.	.	100
1.8	100	.	.	.	.	.	.	.	.	.	.	.	100
1.9	100	.	.	.	.	.	.	.	.	.	.	.	100
2.0	100	.	.	.	.	.	.	.	.	.	.	.	100
2.1	100	.	.	.	.	.	.	.	.	.	.	.	100
2.2	100	.	.	.	.	.	.	.	.	.	.	.	100
2.3	100	.	.	.	.	.	.	.	.	.	.	.	100
2.4	100	.	.	.	.	.	.	.	.	.	.	.	100
2.5	100	.	.	.	.	.	.	.	.	.	.	.	100
2.6	100	.	.	.	.	.	.	.	.	.	.	.	100
2.7	100	.	.	.	.	.	.	.	.	.	.	.	100
2.8	100	.	.	.	.	.	.	.	.	.	.	.	100
2.9	100	.	.	.	.	.	.	.	.	.	.	.	100
3.0	100	.	.	.	.	.	.	.	.	.	.	.	100
3.1	100	.	.	.	.	.	.	.	.	.	.	.	100
3.2	100	.	.	.	.	.	.	.	.	.	.	.	100
3.3	100	.	.	.	.	.	.	.	.	.	.	.	100
3.4	100	.	.	.	.	.	.	.	.	.	.	.	100
3.5	100	.	.	.	.	.	.	.	.	.	.	.	100
3.6	100	.	.	.	.	.	.	.	.	.	.	.	100
3.7	100	.	.	.	.	.	.	.	.	.	.	.	100
3.8	100	.	.	.	.	.	.	.	.	.	.	.	100
3.9	100	.	.	.	.	.	.	.	.	.	.	.	100
4.0	100	.	.	.	.	.	.	.	.	.	.	.	100
4.1	100	.	.	.	.	.	.	.	.	.	.	.	100
4.2	100	.	.	.	.	.	.	.	.	.	.	.	100
4.3	100								

STATION 24 34.17N 119.52W FOR ALL DIRECTIONS													TOTAL	
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS														
HEIGHT(METERS)	PERIOD(SECONDS)													
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER			
0.0-0.49	114	22	162	293	49	24	4	1				669		
0.50-1.00	131	85	211	1250	641	496	147	27				3590		
1.01-1.49	0	5	500	471	539	803	601	105				3058		
1.50-1.99			98	174	121	377	676	273				1737		
2.00-2.49			6	50	21	60	298	258				1737		
2.50-2.99				4	5	5	36	107				222		
3.00-3.49							3	16				0		
3.50-3.99								1				0		
4.00-4.49												0		
4.50-4.99												0		
5.00+												0		
TOTAL	251	141	1587	2242	1376	1765	1765	788	58	0	0	58440		
MEAN HS(M) = 1.1 LARGEST HS(M) = 3.8 MEAN TP(SEC) = 10.0 TOTAL CASES = 58440.														



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 24 (34.17N 119.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1957	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1958	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1959	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1960	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1961	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1962	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1963	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1964	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1965	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1966	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1967	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1968	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1969	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1970	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1971	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1972	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1973	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1974	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1975	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
MEAN	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 24 (34.17N 119.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1957	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1958	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1959	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1960	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1961	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1962	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1963	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1964	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1965	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1966	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1967	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1968	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1969	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1970	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1971	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1972	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1973	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1974	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
1975	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1
MEAN	1.5	1.6	1.4	1.3	1.1	1.0	0.8	0.7	0.7	0.9	1.3	1.6	1.1

20 YR. STATISTICS FOR WIS STATION 24 (34.17N 119.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.1
MEAN PEAK WAVE PERIOD (SECONDS) =	10.0
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	292.5
STANDARD DEVIATION OF HS (METERS) =	0.5
STANDARD DEVIATION OF TP (SECONDS) =	2.5
LARGEST HS (METERS) =	3.8
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	278.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121318

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	398	.	.	.	.	.	.	.	.	.	.	.	398
0.1	203	.	.	.	.	.	.	.	.	.	.	.	203
0.2	303	.	.	.	.	.	.	.	.	.	.	.	303
0.3	.	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.	.
1.1	.	.	.	.	.	.	.	.	.	.	.	.	.
1.2	.	.	.	.	.	.	.	.	.	.	.	.	.
1.3	.	.	.	.	.	.	.	.	.	.	.	.	.
1.4	.	.	.	.	.	.	.	.	.	.	.	.	.
1.5	.	.	.	.	.	.	.	.	.	.	.	.	.
1.6	.	.	.	.	.	.	.	.	.	.	.	.	.
1.7	.	.	.	.	.	.	.	.	.	.	.	.	.
1.8	.	.	.	.	.	.	.	.	.	.	.	.	.
1.9	.	.	.	.	.	.	.	.	.	.	.	.	.
2.0	.	.	.	.	.	.	.	.	.	.	.	.	.
2.1	.	.	.	.	.	.	.	.	.	.	.	.	.
2.2	.	.	.	.	.	.	.	.	.	.	.	.	.
2.3	.	.	.	.	.	.	.	.	.	.	.	.	.
2.4	.	.	.	.	.	.	.	.	.	.	.	.	.
2.5	.	.	.	.	.	.	.	.	.	.	.	.	.
2.6	.	.	.	.	.	.	.	.	.	.	.	.	.
2.7	.	.	.	.	.	.	.	.	.	.	.	.	.
2.8	.	.	.	.	.	.	.	.	.	.	.	.	.
2.9	.	.	.	.	.	.	.	.	.	.	.	.	.
3.0	.	.	.	.	.	.	.	.	.	.	.	.	.
3.1	.	.	.	.	.	.	.	.	.	.	.	.	.
3.2	.	.	.	.	.	.	.	.	.	.	.	.	.
3.3	.	.	.	.	.	.	.	.	.	.	.	.	.
3.4	.	.	.	.	.	.	.	.	.	.	.	.	.
3.5	.	.	.	.	.	.	.	.	.	.	.	.	.
3.6	.	.	.	.	.	.	.	.	.	.	.	.	.
3.7	.	.	.	.	.	.	.	.	.	.	.	.	.
3.8	.	.	.	.	.	.	.	.	.	.	.	.	.
3.9	.	.	.	.	.	.	.	.	.	.	.	.	.
4.0	.	.	.	.	.	.	.	.	.	.	.	.	.
4.1	.	.	.	.	.	.	.	.	.	.	.	.	.
4.2	.	.	.	.	.	.	.	.	.	.	.	.	.
4.3	.	.	.	.	.	.	.	.	.	.	.	.	.
4.4	.	.	.	.	.	.	.	.	.	.	.	.	.
4.5	.	.	.	.	.	.	.	.	.	.	.	.	.
4.6	.	.	.	.	.	.	.	.	.	.	.	.	.
4.7								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	0.00	297	.	.	.	.	.	.	.	.	.	.	297
0.1	0.10	263	.	.	.	.	.	.	.	.	.	.	263
0.2	0.20	35	3	.	.	.	.	.	.	.	.	.	35
0.3	0.30	.	.	.	.	.	.	.	.	.	.	.	.
0.4	0.40	.	.	.	.	.	.	.	.	.	.	.	.
0.5	0.50	.	.	.	.	.	.	.	.	.	.	.	.
0.6	0.60	.	.	.	.	.	.	.	.	.	.	.	.
0.7	0.70	.	.	.	.	.	.	.	.	.	.	.	.
0.8	0.80	.	.	.	.	.	.	.	.	.	.	.	.
0.9	0.90	.	.	.	.	.	.	.	.	.	.	.	.
1.0	1.00	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL		568	3	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.8		MEAN TP(SEC) = 2.8		NO. OF CASES = 335.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	-	65	.	.	.	.	.	.	.	.	.	.	65
0.50	-	152	.	.	.	.	.	.	.	.	.	.	152
1.00	-	25	.	.	.	.	.	.	.	.	.	.	25
1.50	-	3	.	.	.	.	.	.	.	.	.	.	3
2.00	-	.	.	.	.	.	.	.	.	.	.	.	.
2.50	-	.	.	.	.	.	.	.	.	.	.	.	.
3.00	-	.	.	.	.	.	.	.	.	.	.	.	.
3.50	-	.	.	.	.	.	.	.	.	.	.	.	.
4.00	-	.	.	.	.	.	.	.	.	.	.	.	.
4.50	-	.	.	.	.	.	.	.	.	.	.	.	.
5.00	-	.	.	.	.	.	.	.	.	.	.	.	.
5.50	-	.	.	.	.	.	.	.	.	.	.	.	.
6.00	-	.	.	.	.	.	.	.	.	.	.	.	.
6.50	-	.	.	.	.	.	.	.	.	.	.	.	.
7.00	-	.	.	.	.	.	.	.	.	.	.	.	.
7.50	-	.	.	.	.	.	.	.	.	.	.	.	.
8.00	-	.	.	.	.	.	.	.	.	.	.	.	.
8.50	-	.	.	.	.	.	.	.	.	.	.	.	.
9.00	-	.	.	.	.	.	.	.	.	.	.	.	.
9.50	-	.	.	.	.	.	.	.	.	.	.	.	.
10.00	+	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL		226	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.5		MEAN TP(SEC) = 2.9		NO. OF CASES = 133.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	
0	47	.	.	.	.	.	.	.	.	.	.	.	47
0.0	44	.	.	.	.	.	.	.	.	.	.	.	44
0.1	1	.	.	.	.	.	.	.	.	.	.	.	1
0.2	.	.	.	.	.	.	.	.	.	.	.	.	0
0.3	.	.	.	.	.	.	.	.	.	.	.	.	0
0.4	.	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	92	0	0	0	0	0	0	0	0	0	0	0	92
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.0		MEAN TP(SEC) = 2.6		NO. OF CASES = 55.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
00	30	.	.	.	.	.	.	.	.	.	.	.	30
00	29	.	.	.	.	.	.	.	.	.	.	.	29
00	28	.	.	.	.	.	.	.	.	.	.	.	28
00	27	.	.	.	.	.	.	.	.	.	.	.	27
00	26	.	.	.	.	.	.	.	.	.	.	.	26
00	25	.	.	.	.	.	.	.	.	.	.	.	25
00	24	.	.	.	.	.	.	.	.	.	.	.	24
00	23	.	.	.	.	.	.	.	.	.	.	.	23
00	22	.	.	.	.	.	.	.	.	.	.	.	22
00	21	.	.	.	.	.	.	.	.	.	.	.	21
00	20	.	.	.	.	.	.	.	.	.	.	.	20
00	19	.	.	.	.	.	.	.	.	.	.	.	19
00	18	.	.	.	.	.	.	.	.	.	.	.	18
00	17	.	.	.	.	.	.	.	.	.	.	.	17
00	16	.	.	.	.	.	.	.	.	.	.	.	16
00	15	.	.	.	.	.	.	.	.	.	.	.	15
00	14	.	.	.	.	.	.	.	.	.	.	.	14
00	13	.	.	.	.	.	.	.	.	.	.	.	13
00	12	.	.	.	.	.	.	.	.	.	.	.	12
00	11	.	.	.	.	.	.	.	.	.	.	.	11
00	10	.	.	.	.	.	.	.	.	.	.	.	10
00	9	.	.	.	.	.	.	.	.	.	.	.	9
00	8	.	.	.	.	.	.	.	.	.	.	.	8
00	7	.	.	.	.	.	.	.	.	.	.	.	7
00	6	.	.	.	.	.	.	.	.	.	.	.	6
00	5	.	.	.	.	.	.	.	.	.	.	.	5
00	4	.	.	.	.	.	.	.	.	.	.	.	4
00	3	.	.	.	.	.	.	.	.	.	.	.	3
00	2	.	.	.	.	.	.	.	.	.	.	.	2
00	1	.	.	.	.	.	.	.	.	.	.	.	1
00	0	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	33	0	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.2		LARGEST HS(M) = 0.5		MEAN TP(SEC) = 1.8		NO. OF CASES = 20.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
00.0	29	.	.	.	.	.	.	.	.	.	.	.	29	
00.1	3	.	.	.	.	.	.	.	.	.	.	.	3	
00.2	.	.	.	.	.	.	.	.	.	.	.	.	.
00.3	.	.	.	.	.	.	.	.	.	.	.	.	.
00.4	.	.	.	.	.	.	.	.	.	.	.	.	.
00.5	.	.	.	.	.	.	.	.	.	.	.	.	.
00.6	.	.	.	.	.	.	.	.	.	.	.	.	.
00.7	.	.	.	.	.	.	.	.	.	.	.	.	.
00.8	.	.	.	.	.	.	.	.	.	.	.	.	.
00.9	.	.	.	.	.	.	.	.	.	.	.	.	.
01.0	.	.	.	.	.	.	.	.	.	.	.	.	.
01.1	.	.	.	.	.	.	.	.	.	.	.	.	.
01.2	.	.	.	.	.	.	.	.	.	.	.	.	.
01.3	.	.	.	.	.	.	.	.	.	.	.	.	.
01.4	.	.	.	.	.	.	.	.	.	.	.	.	.
01.5	.	.	.	.	.	.	.	.	.	.	.	.	.
01.6	.	.	.	.	.	.	.	.	.	.	.	.	.
01.7	.	.	.	.	.	.	.	.	.	.	.	.	.
01.8	.	.	.	.	.	.	.	.	.	.	.	.	.
01.9	.	.	.	.	.	.	.	.	.	.	.	.	.
02.0	.	.	.	.	.	.	.	.	.	.	.	.	.
02.1	.	.	.	.	.	.	.	.	.	.	.	.	.
02.2	.	.	.	.	.	.	.	.	.	.	.	.	.
02.3	.	.	.	.	.	.	.	.	.	.	.	.	.
02.4	.	.	.	.	.	.	.	.	.	.	.	.	.
02.5	.	.	.	.	.	.	.	.	.	.	.	.	.
02.6	.	.	.	.	.	.	.	.	.	.	.	.	.
02.7	.	.	.	.	.	.	.	.	.	.	.	.	.
02.8	.	.	.	.	.	.	.	.	.	.	.	.	.
02.9	.	.	.	.	.	.	.	.	.	.	.	.	.
03.0	.	.	.	.	.	.	.	.	.	.	.	.	.
03.1	.	.	.	.	.	.	.	.	.	.	.	.	.
03.2	.	.	.	.	.	.	.	.	.	.	.	.	.
03.3	.	.	.	.	.	.	.	.	.	.	.	.	.
03.4	.	.	.	.	.	.	.	.	.	.	.	.	.
03.5	.	.	.	.	.	.	.	.	.	.	.	.	.
03.6	.	.	.	.	.	.	.	.	.	.	.	.	.
03.7	.	.	.	.	.	.	.	.	.	.	.	.	.
03.8	.	.	.	.	.	.	.	.	.	.	.	.	.
03.9	.	.	.	.	.	.	.	.	.	.	.	.	.
04.0	.	.	.	.	.	.	.	.	.	.	.	.	.
04.1	.	.	.	.	.	.	.	.	.	.	.	.	.
04.2	.	.	.	.	.	.	.	.	.	.	.	.	.
04.3	.	.	.	.	.	.	.	.	.	.	.	.	.
04.4	.	.												

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
10	1	.	.	.	.	.	.	.	.	.	.	10
9	1	.	.	.	.	.	.	.	.	.	.	9
8	1	.	.	.	.	.	.	.	.	.	.	8
7	1	.	.	.	.	.	.	.	.	.	.	7
6	1	.	.	.	.	.	.	.	.	.	.	6
5	1	.	.	.	.	.	.	.	.	.	.	5
4	1	.	.	.	.	.	.	.	.	.	.	4
3	1	.	.	.	.	.	.	.	.	.	.	3
2	1	.	.	.	.	.	.	.	.	.	.	2
1	1	.	.	.	.	.	.	.	.	.	.	1
TOTAL	11	0	6	5	0	0	0	0	0	0	0	14	
MEAN HS(M) = 0.8		LARGEST HS(M) = 1.9		MEAN TP(SEC) = 4.9		NO. OF CASES = 14.							

[illegible][illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	1												1
0.1	1												1
0.2	1												1
0.3	1												1
0.4	1												1
0.5	1												1
0.6	1												1
0.7	1												1
0.8	1												1
0.9	1												1
1.0	1												1
1.1	1												1
1.2	1												1
1.3	1												1
1.4	1												1
1.5	1												1
1.6	1												1
1.7	1												1
1.8	1												1
1.9	1												1
2.0	1												1
2.1	1												1
2.2	1												1
2.3	1												1
2.4	1												1
2.5	1												1
2.6	1												1
2.7	1												1
2.8	1												1
2.9	1												1
3.0	1												1
3.1	1												1
3.2	1												1
3.3	1												1
3.4	1												1
3.5	1												1
3.6	1												1
3.7	1												1
3.8	1												1
3.9	1												1
4.0	1												1
4.1	1												1
4.2	1												1
4.3	1												1
4.4	1												1
4.5	1												

STATION 25 34.33N 119.52W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	213	530	3021	5432	1440	571	148	27				11390
0.5	112	802	9336	9849	7399	8208	3456	511	35	29		39737
1.0	27	169	3177	2677	2248	1521	7291	2099	1228	13		23350
1.5		32	335	939	381	1285	4856	4339	2668	1		12436
2.0		1	13	119	99	106	908	3264	5200	6		5036
2.5				10	11	15	147	898	636			1717
3.0						3	13	189	263			468
3.5								32	102			134
4.0									30			30
4.5									1			1
5.0												0
TOTAL	352	1534	15882	19026	11578	15709	16819	11359	1983	57	0	
MEAN HS(M) =	1.0	LARGEST HS(M) =	4.5	MEAN TP(SEC) =	10.5	NO. OF CASES =	55128.					

STATION 25 34.33N 119.52W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	249											249
0.5	220											220
1.0	8											8
1.5	1	1		5	3	3	1	1				14
2.0												0
2.5												0
3.0												0
3.5												0
4.0												0
4.5												0
5.0												0
TOTAL	478	1	0	6	4	4	1	1	0	0	0	
MEAN HS(M) =	0.5	LARGEST HS(M) =	2.2	MEAN TP(SEC) =	3.0	NO. OF CASES =	294.					

STATION 25 34.33N 119.52W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	451											451
0.5	253											253
1.0	1											1
1.5		1										1
2.0												0
2.5												0
3.0												0
3.5												0
4.0												0
4.5												0
5.0												0
TOTAL	705	2	0	0	0	0	0	0	0	0	0	
MEAN HS(M) =	0.4	LARGEST HS(M) =	2.2	MEAN TP(SEC) =	2.6	NO. OF CASES =	415.					

STATION 25 34.33N 119.52W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	545											545
0.5	164											164
1.0	1											1
1.5		1										1
2.0												0
2.5												0
3.0												0
3.5												0
4.0												0
4.5												0
5.0												0
TOTAL	710	1	0	0	0	0	0	0	0	0	0	
MEAN HS(M) =	0.4	LARGEST HS(M) =	2.0	MEAN TP(SEC) =	2.6	NO. OF CASES =	417.					

STATION 25 34.33N 119.52W FOR ALL DIRECTIONS													TOTAL	
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS														
HEIGHT(METERS)	PERIOD(SECONDS)													
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER			
0.0-0.9	322	54	306	551	145	58	14	2	1	2	.	1452		
1.0-1.9	177	80	938	990	750	224	345	51	1	1	.	4160		
2.0-2.9	6	17	320	273	230	130	738	211	1	1	.	2363		
3.0-3.9	1	2	34	98	40	11	489	245	1	1	.	1506		
4.0-4.9	.	.	.	12	10	.	92	326	1	.	.	170		
5.0-5.9	.	.	.	1	1	1	14	18	63	.	.	146		
6.0-6.9	1	3	26	.	.	13		
7.0-7.9	10	.	.	3		
8.0-8.9	3	.	.	.		
9.0-9.9		
10.0-10.9		
11.0-11.9		
12.0-12.9		
13.0-13.9		
14.0-14.9		
15.0-15.9		
16.0-16.9		
17.0-17.9		
18.0-18.9		
19.0-19.9		
20.0-20.9		
21.0-21.9		
22.0-22.9		
23.0-23.9		
24.0-24.9		
25.0-25.9		
26.0-26.9		
27.0-27.9		
28.0-28.9		
29.0-29.9		
30.0-30.9		
31.0-31.9		
32.0-32.9		
33.0-33.9		
34.0-34.9		
35.0-35.9		
36.0-36.9		
37.0-37.9		
38.0-38.9		
39.0-39.9		
40.0-40.9		
41.0-41.9		
42.0-42.9		
43.0-43.9		
44.0-44.9		
45.0-45.9		
46.0-46.9		
47.0-47.9		
48.0-48.9		
49.0-49.9		
50.0-50.9		
51.0-51.9		
52.0-52.9		
53.0-53.9		
54.0-54.9		
55.0-55.9		
56.0-56.9		
57.0-57.9		
58.0-58.9		
59.0-59.9		
60.0-60.9		
61.0-61.9		
62.0-62.9		
63.0-63.9		
64.0-64.9		
65.0-65.9		
66.0-66.9		
67.0-67.9		
68.0-68.9		
69.0-69.9		
70.0-70.9		
71.0-71.9		
72.0-72.9		
73.0-73.9		
74.0-74.9		
75.0-75.9		
76.0-76.9		
77.0-77.9		
78.0-78.9		
79.0-79.9		
80.0-80.9		
81.0-81.9		
82.0-82.9		
83.0-83.9		
84.0-84.9		
85.0-85.9		
86.0-86.9		
87.0-87.9		
88.0-88.9		
89.0-89.9		
90.0-90.9		
91.0-91.9		
92.0-92.9		
93.0-93.9		
94.0-94.9		
95.0-95.9		
96.0-96.9		
97.0-97.9		
98.0-98.9		
99.0-99.9		
TOTAL	506	157	1599	1925	1176	1581	1690	1136	197	3	0			

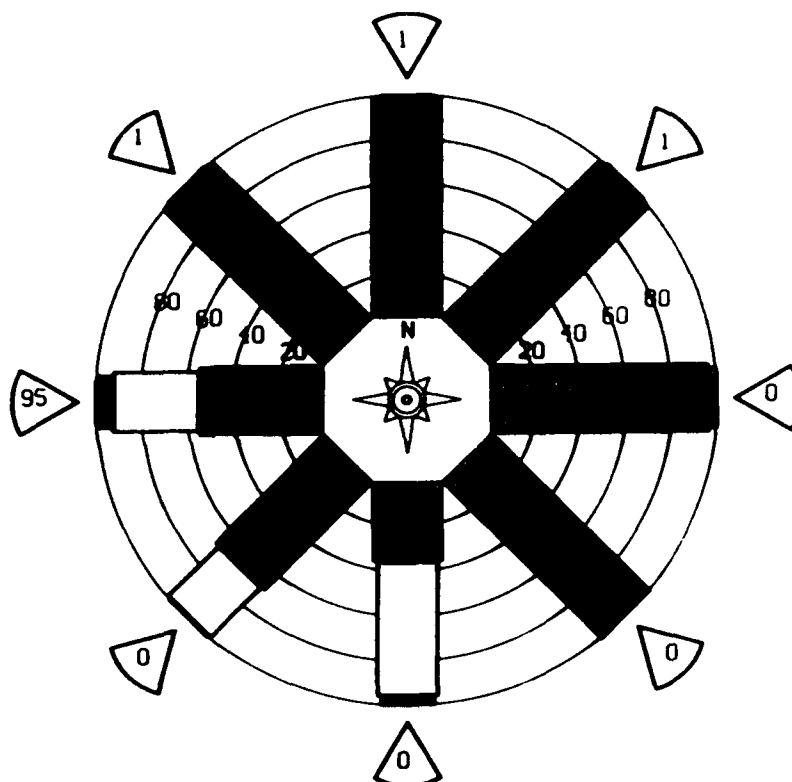
MEAN HS(M) = 1.0 LARGEST HS(M) = 4.5 MEAN TP(SEC) = 10.1 TOTAL CASES = 58440.

MEAN HS(M) = 1.0 LARGEST HS(M) = 4.5 MEAN TP(SEC) = 10.1 TOTAL CASES = 58440.

STATION 25
34.33N, 119.52W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 25 (34.33N 119.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1957	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1958	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1959	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1960	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1961	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1962	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1963	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1964	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1965	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1966	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1967	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1968	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1969	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1970	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1971	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1972	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1973	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1974	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
1975	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9
MEAN	1.5	1.5	1.3	1.1	0.8	0.8	0.6	0.5	0.6	0.8	1.1	1.5	0.9

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 25 (34.33N 119.52W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1957	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1958	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1959	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1960	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1961	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1962	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1963	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1964	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1965	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1966	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1967	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1968	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1969	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1970	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1971	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1972	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1973	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1974	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
1975	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5

20 YR. STATISTICS FOR WIS STATION 25 (34.33N 119.52W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 1.0
 MEAN PEAK WAVE PERIOD (SECONDS) = 10.1
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.6
 STANDARD DEVIATION OF TP (SECONDS) = 3.0
 LARGEST HS (METERS) = 4.5
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 16.7
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 266.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 69121312

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0	412	.	.	.	.	.	.	.	.	.	.	.	412
0.1	181	.	.	.	.	.	.	.	.	.	.	.	181
0.2	133	.	.	.	.	.	.	.	.	.	.	.	133
0.3	133	.	.	.	.	.	.	.	.	.	.	.	133
0.4	133	.	.	.	.	.	.	.	.	.	.	.	133
0.5	133	.	.	.	.	.	.	.	.	.	.	.	133
0.6	133	.	.	.	.	.	.	.	.	.	.	.	133
0.7	133	.	.	.	.	.	.	.	.	.	.	.	133
0.8	133	.	.	.	.	.	.	.	.	.	.	.	133
0.9	133	.	.	.	.	.	.	.	.	.	.	.	133
1.0	133	.	.	.	.	.	.	.	.	.	.	.	133
1.1	133	.	.	.	.	.	.	.	.	.	.	.	133
1.2	133	.	.	.	.	.	.	.	.	.	.	.	133
1.3	133	.	.	.	.	.	.	.	.	.	.	.	133
1.4	133	.	.	.	.	.	.	.	.	.	.	.	133
1.5	133	.	.	.	.	.	.	.	.	.	.	.	133
1.6	133	.	.	.	.	.	.	.	.	.	.	.	133
1.7	133	.	.	.	.	.	.	.	.	.	.	.	133
1.8	133	.	.	.	.	.	.	.	.	.	.	.	133
1.9	133	.	.	.	.	.	.	.	.	.	.	.	133
2.0	133	.	.	.	.	.	.	.	.	.	.	.	133
2.1	133	.	.	.	.	.	.	.	.	.	.	.	133
2.2	133	.	.	.	.	.	.	.	.	.	.	.	133
2.3	133	.	.	.	.	.	.	.	.	.	.	.	133
2.4	133	.	.	.	.	.	.	.	.	.	.	.	133
2.5	133	.	.	.	.	.	.	.	.	.	.	.	133
2.6	133	.	.	.	.	.	.	.	.	.	.	.	133
2.7	133	.	.	.	.	.	.	.	.	.	.	.	133
2.8	133	.	.	.	.	.	.	.	.	.	.	.	133
2.9	133	.	.	.	.	.	.	.	.	.	.	.	133
3.0	133	.	.	.	.	.	.	.	.	.	.	.	133
3.1	133	.	.	.	.	.	.	.	.	.	.	.	133
3.2	133	.	.	.	.	.	.	.	.	.	.	.	133
3.3	133	.	.	.	.	.	.	.	.	.	.	.	133
3.4	133	.	.	.	.	.	.	.	.	.	.	.	133
3.5	133	.	.	.	.	.	.	.	.	.	.	.	133
3.6	133	.	.	.	.	.	.	.	.	.	.	.	133
3.7	133	.	.	.	.	.	.	.	.	.	.	.	133
3.8	133	.	.	.	.	.	.	.	.	.	.	.	133
3.9	133	.	.	.	.	.	.	.	.	.	.	.	133
4.0	133	.	.	.	.	.	.	.	.	.	.	.	133
4.1	133	.	.	.	.	.	.	.	.	.	.	.	133
4.2	133	.	.	.	.	.	.	.	.	.	.	.	133
4.3	133</								

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	299	.	.	.	.	.	.	.	.	.	.	.	299
0.5-0.99	147	.	.	.	.	.	.	.	.	.	.	.	147
1.0-1.49	.	.	.	.	.	.	.	.	.	.	.	.	0
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	.	.	0
6.5-6.99	.	.	.	.	.	.	.	.	.	.	.	.	0
7.0-7.49	.	.	.	.	.	.	.	.	.	.	.	.	0
7.5-7.99	.	.	.	.	.	.	.	.	.	.	.	.	0
8.0-8.49	.	.	.	.	.	.	.	.	.	.	.	.	0
8.5-8.99	.	.	.	.	.	.	.	.	.	.	.	.	0
9.0-9.49	.	.	.	.	.	.	.	.	.	.	.	.	0
9.5-9.99	.	.	.	.	.	.	.	.	.	.	.	.	0
10.0-10.49	.	.	.	.	.	.	.	.	.	.	.	.	0
10.5-10.99	.	.	.	.	.	.	.	.	.	.	.	.	0
11.0-11.49	.	.	.	.	.	.	.	.	.	.	.	.	0
11.5-11.99	.	.	.	.	.	.	.	.	.	.	.	.	0
12.0-12.49	.	.	.	.	.	.	.	.	.	.	.	.	0
12.5-12.99	.	.	.	.	.	.	.	.	.	.	.	.	0
13.0-13.49	.	.	.	.	.	.	.	.	.	.	.	.	0
13.5-13.99	.	.	.	.	.	.	.	.	.	.	.	.	0
14.0-14.49	.	.	.	.	.	.	.	.	.	.	.	.	0
14.5-14.99	.	.	.	.	.	.	.	.	.	.	.	.	0
15.0-15.49	.	.	.	.	.	.	.	.	.	.	.	.	0
15.5-15.99	.	.	.	.	.	.	.	.	.	.	.	.	0
16.0-16.49	.	.	.	.	.	.	.	.	.	.	.	.	0
16.5-16.99	.	.	.	.	.	.	.	.	.	.	.	.	0
17.0-17.49	.	.	.	.	.	.	.	.	.	.	.	.	0
17.5-17.99	.	.	.	.	.	.	.	.	.	.	.	.	0
18.0-18.49	.	.	.	.	.	.	.	.	.	.	.	.	0
18.5-18.99	.	.	.	.	.	.	.	.	.	.	.	.	0
19.0-19.49	.	.	.	.	.	.	.	.	.	.	.	.	0
19.5-19.99	.	.	.	.	.	.	.	.	.	.	.	.	0
20.0-20.49	.	.	.	.	.	.	.	.	.	.	.	.	0
20.5-20.99	.	.	.	.	.	.	.	.	.	.	.	.	0
21.0-21.49	.	.	.	.	.	.	.	.	.	.	.	.	0
21.5-21.99	.												

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL		
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0	51	.	.	.	.	.	.	.	.	.	.	.	51
0.1	7	.	.	.	.	.	.	.	.	.	.	.	7
0.2	3	.	.	.	.	.	.	.	.	.	.	.	3
0.3	.	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	131	0	0	0	0	0	0	0	0	0	0	0	131	
MEAN HS(M) = 0.5		LARGEST HS(M) = 1.2		MEAN TP(SEC) = 2.8		NO. OF CASES = 77.								

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	20	.	.	.	.	.	.	.	.	.	.
0.5-0.99	23	.	.	.	.	.	.	.	.	.	.
1.0-1.49	1	5	.	.	.	.	.	.	.	.	.
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.
TOTAL	44	5	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.6 LARGEST HS(M) = 1.9 MEAN TP(SEC) = 3.0 NO. OF CASES = 30.											

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	11	.	.	.	.	.	.	.	.	.	.
0.5-0.99	5	.	.	.	.	.	.	.	.	.	.
1.0-1.49	.	1	.	.	.	.	.	.	.	.	.
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.
TOTAL	16	1	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 1.6 MEAN TP(SEC) = 2.6 NO. OF CASES = 11.											

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	11	.	.	.	.	.	.	.	.	.	.
0.5-0.99	5	.	.	.	.	.	.	.	.	.	.
1.0-1.49	.	.	.	.	.	.	.	.	.	.	.
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.
TOTAL	16	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.3 LARGEST HS(M) = 0.7 MEAN TP(SEC) = 2.1 NO. OF CASES = 10.											

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
0.0-0.49	6	.	.	.	.	.	.	.	.	.	.
0.5-0.99	3	1	.	.	.	.	.	.	.	.	.
1.0-1.49	.	.	6	6	.	.	.	.	.	.	.
1.5-1.99	.	.	.	1	.	.	.	.	.	.	.
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.
TOTAL	9	1	6	7	0	0	0	0	0	0	0
MEAN HS(M) = 1.1 LARGEST HS(M) = 2.3 MEAN TP(SEC) = 5.6 NO. OF CASES = 16.											

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	6	.	.	.	.	.	.	.	.	.	.	.	6
1	3	.	.	.	.	.	.	.	.	.	.	.	3
2	1	.	.	.	.	.	.	.	.	.	.	.	1
3	1	.	.	.	.	.	.	.	.	.	.	.	1
4	1	.	.	.	.	.	.	.	.	.	.	.	1
5	1	.	.	.	.	.	.	.	.	.	.	.	1
6	1	.	.	.	.	.	.	.	.	.	.	.	1
7	1	.	.	.	.	.	.	.	.	.	.	.	1
8	1	.	.	.	.	.	.	.	.	.	.	.	1
9	1	.	.	.	.	.	.	.	.	.	.	.	1
TOTAL	9	3	2	3	2	0	0	0	0	0	0	14	
MEAN HS(M) = 1.2		LARGEST HS(M) = 2.2		MEAN TP(SEC) = 5.5		NO. OF CASES = 14.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
0.0	11	.	.	.	.	.	.	.	.	.	.	.	11
0.1	3	.	.	.	1	.	.	.	.	.	.	.	4
0.2	.	1	.	6	3	.	.	5	.	.	.	.	10
0.3	.	.	.	1	1	.	.	.	.	.	.	.	8
0.4	.	.	.	.	.	.	.	.	.	.	.	.	0
0.5	.	.	.	.	.	.	.	.	.	.	.	.	0
0.6	.	.	.	.	.	.	.	.	.	.	.	.	0
0.7	.	.	.	.	.	.	.	.	.	.	.	.	0
0.8	.	.	.	.	.	.	.	.	.	.	.	.	0
0.9	.	.	.	.	.	.	.	.	.	.	.	.	0
1.0	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	1	0	8	4	0	0	6	0	0	0	0	23
MEAN HS(M) = 0.9		LARGEST HS(M) = 1.7		MEAN TP(SEC) = 7.1		NO. OF CASES = 23.							

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
100	25	.	.	.	.	.	.	.	.	.	.	.	25
95	1	.	.	.	.	.	.	.	.	.	.	.	2
90	1	.	.	.	.	.	.	.	.	.	.	.	17
85	1	.	.	.	.	.	.	.	.	.	.	.	13
80	1	.	.	.	.	.	.	.	.	.	.	.	10
75	1	.	.	.	.	.	.	.	.	.	.	.	9
70	1	.	.	.	.	.	.	.	.	.	.	.	8
65	1	.	.	.	.	.	.	.	.	.	.	.	7
60	1	.	.	.	.	.	.	.	.	.	.	.	6
55	1	.	.	.	.	.	.	.	.	.	.	.	5
50	1	.	.	.	.	.	.	.	.	.	.	.	4
45	1	.	.	.	.	.	.	.	.	.	.	.	3
40	1	.	.	.	.	.	.	.	.	.	.	.	2
35	1	.	.	.	.	.	.	.	.	.	.	.	1
30	1	.	.	.	.	.	.	.	.	.	.	.	0
25	1	.	.	.	.	.	.	.	.	.	.	.	0
20	1	.	.	.	.	.	.	.	.	.	.	.	0
15	1	.	.	.	.	.	.	.	.	.	.	.	0
10	1	.	.	.	.	.	.	.	.	.	.	.	0
5	1	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	27	1	0	16	10	1	2	1	0	0	0	0	39
MEAN HS(M) = 1.0		LARGEST HS(M) = 2.5		MEAN TP(SEC) = 6.3		NO. OF CASES = 39.							

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
10.0	5												67
9.5	15												129
9.0	1												117
8.5	1												118
8.0	1												32
7.5	1												11
7.0	1												0
6.5	1												0
6.0	1												0
5.5	1												0
5.0	1												0
4.5	1												0
4.0	1												0
3.5	1												0
3.0	1												0
2.5	1												0
2.0	1												0
1.5	1												0
1.0	1												0
0.5	1												0
TOTAL		72	6	15	156	166	55	43	20	1	0	0	
MEAN HS(M) =	1.2	LARGEST HS(M) =		3.1	MEAN TP(SEC) =		9.0	NO. OF CASES =		322.			

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	136	573	2457	4067	793	306	63	20	13	1	8416
0.50-1.00	83	1091	8942	11226	6981	6028	1779	287	154	3	364433
1.00-1.50	15	200	4447	3003	3560	6959	6456	1156	54	1	25850
1.50-2.00	.	34	766	1445	3802	2758	6192	3095	157	.	15249
2.00-2.50	.	1	47	347	205	496	2551	3181	299	1	2128
2.50-3.00	.	.	1	3	54	51	451	1519	398	.	2515
3.00-3.50	.	.	.	.	5	11	78	429	183	.	709
3.50-4.00	.	.	.	.	.	.	8	106	75	.	189
4.00-4.50	.	.	.	.	.	.	.	3	30	.	33
4.50-5.00	.	.	.	.	.	.	.	.	1	.	1
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	234	1899	16660	20132	12400	16609	17578	9796	1210	5	0
MEAN HS(M) =	1.1	LARGEST HS(M) =	4.5	MEAN TP(SEC) =	10.3	NO. OF CASES =	56427.				

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	133	.	.	1	1	.	.	.	.	.	133
0.50-1.00	104	.	.	3	1	.	.	.	.	.	105
1.00-1.50	5	.	.	10	5	5	1	1	.	.	24
1.50-2.00	.	1	.	.	.	.	.	.	.	.	3
2.00-2.50	.	.	.	.	.	.	.	.	.	.	0
2.50-3.00	.	.	.	.	.	.	.	.	.	.	0
3.00-3.50	.	.	.	.	.	.	.	.	.	.	0
3.50-4.00	.	.	.	.	.	.	.	.	.	.	0
4.00-4.50	.	.	.	.	.	.	.	.	.	.	0
4.50-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	245	1	0	14	6	6	1	1	0	0	0
MEAN HS(M) =	0.6	LARGEST HS(M) =	2.2	MEAN TP(SEC) =	3.5	NO. OF CASES =	164.				

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

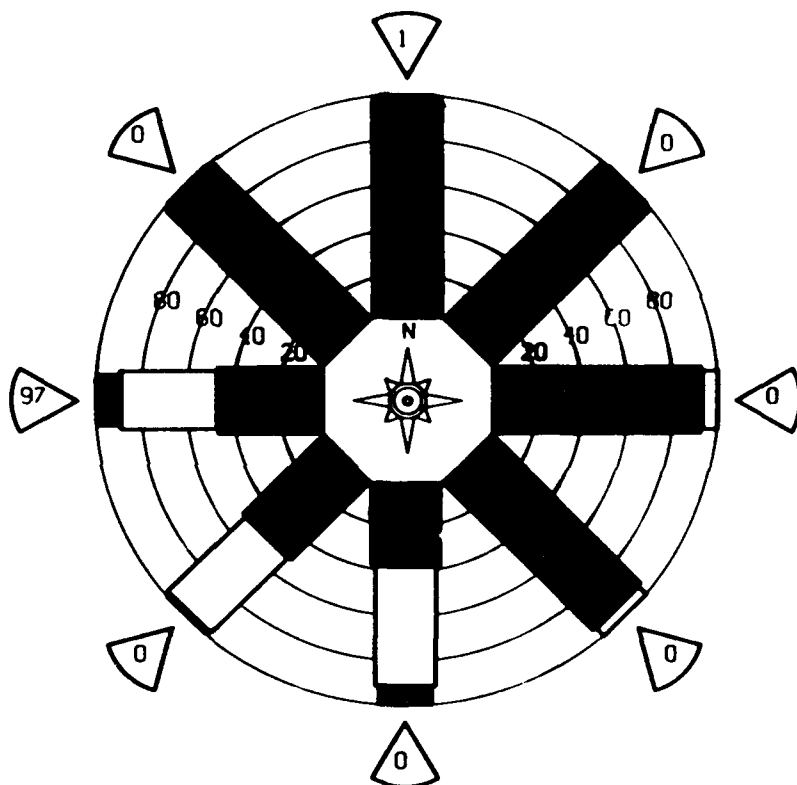
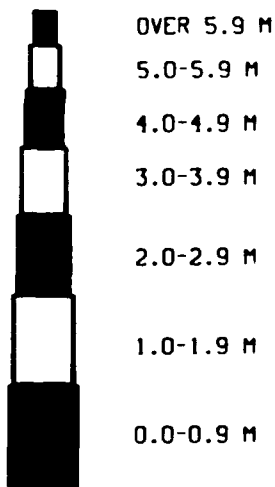
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	285	.	.	.	.	.	.	.	.	.	285
0.50-1.00	128	.	.	1	.	.	.	.	.	.	128
1.00-1.50	1	3	.	.	.	.	.	.	.	.	1
1.50-2.00	.	.	.	.	.	.	.	.	.	.	3
2.00-2.50	.	.	.	.	.	.	.	.	.	.	0
2.50-3.00	.	.	.	.	.	.	.	.	.	.	0
3.00-3.50	.	.	.	.	.	.	.	.	.	.	0
3.50-4.00	.	.	.	.	.	.	.	.	.	.	0
4.00-4.50	.	.	.	.	.	.	.	.	.	.	0
4.50-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	414	3	0	1	0	0	0	0	0	0	0
MEAN HS(M) =	0.4	LARGEST HS(M) =	2.0	MEAN TP(SEC) =	2.5	NO. OF CASES =	246.				

STATION 26 34.33N 119.72W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	304	.	.	.	.	.	.	.	.	.	304
0.50-1.00	95	.	.	.	.	.	.	.	.	.	95
1.00-1.50	.	1	.	.	.	.	.	.	.	.	1
1.50-2.00	.	.	.	.	.	.	.	.	.	.	0
2.00-2.50	.	.	.	.	.	.	.	.	.	.	0
2.50-3.00	.	.	.	.	.	.	.	.	.	.	0
3.00-3.50	.	.	.	.	.	.	.	.	.	.	0
3.50-4.00	.	.	.	.	.	.	.	.	.	.	0
4.00-4.50	.	.	.	.	.	.	.	.	.	.	0
4.50-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	399	1	0	0	0	0	0	0	0	0	0
MEAN HS(M) =	0.4	LARGEST HS(M) =	1.5	MEAN TP(SEC) =	2.6	NO. OF CASES =	235.				

STATION 26 34.33N 119.72W FOR ALL DIRECTIONS										
PERCENT OCCUPRECE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS										
HEIGHT(METERS)	PERIOD(SECONDS)									
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3- LONGER
0.0-0.9	192	57	246	407	79	30	6	2		
1.0-1.9	107	109	894	1128	703	603	177	28		
2.0-2.9	3	210	444	308	364	278	646	116		
3.0-3.9			78	150	84	50	222	310		
4.0-4.9				4	21	5	45	151		
5.0-5.9						1	7	44		
6.0-6.9								10		
7.0-7.9										
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99.0-99.9										
TOTAL	302	193	1666	2032	1256	1665	1759	979	117	0
MEAN HS(M) =	1.1	LARGEST HS(M) =	4.5	MEAN TP(SEC) =	10.1	TOTAL CASES =	58440.			

STATION 26
34.33N, 119.72W
58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 26 (34.33N 119.72W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.6	1.6	1.4	1.1	1.0	0.9	0.7	0.6	0.5	0.7	1.1	1.3	1.0
1957	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1958	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1959	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1960	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1961	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1962	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1963	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1964	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1965	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1966	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1967	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1968	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1969	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1970	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1971	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1972	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1973	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1974	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
1975	1.1	1.1	1.1	1.1	1.0	0.9	0.5	0.0	0.0	0.0	1.1	1.1	1.0
MEAN	1.6	1.7	1.4	1.2	1.0	0.9	0.7	0.6	0.7	0.9	1.3	1.7	

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 26 (34.33N 119.72W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1957	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1958	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1959	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1960	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1961	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1962	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1963	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1964	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1965	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1966	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1967	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1968	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1969	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1970	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1971	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1972	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1973	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1974	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
1975	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	

20 YR. STATISTICS FOR WIS STATION 26 (34.33N 119.72W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) = 1.1
 MEAN PEAK WAVE PERIOD (SECONDS) = 10.1
 MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) = 270.0
 STANDARD DEVIATION OF HS (METERS) = 0.6
 STANDARD DEVIATION OF TP (SECONDS) = 2.7
 LARGEST HS (METERS) = 4.5
 TP (SECONDS) ASSOCIATED WITH THE LARGEST HS = 16.7
 AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS = 273.0
 DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR) 69121315

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	220	.	.	.	.	.	.	.	.	.	.	220
0.1	77	.	.	.	.	.	.	.	.	.	.	77
0.2	.	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	300	7	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 2.7 NO. OF CASES = 181.												

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 22.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	147	.	.	.	.	.	.	.	.	.	.	147
0.1	95	.	.	.	.	.	.	.	.	.	.	95
0.2	.	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	242	4	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.5 LARGEST HS(M) = 2.4 MEAN TP(SEC) = 2.7 NO. OF CASES = 145.												

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 45.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	82	.	.	.	.	.	.	.	.	.	.	82
0.1	90	.	.	.	.	.	.	.	.	.	.	90
0.2	.	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	172	0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 0.9 MEAN TP(SEC) = 2.7 NO. OF CASES = 101.												

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 67.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	20	.	.	.	.	.	.	.	.	.	.	20
0.1	54	.	.	.	.	.	.	.	.	.	.	54
0.2	.	.	.	.	.	.	.	.	.	.	.	.
0.3	.	.	.	.	.	.	.	.	.	.	.	.
0.4	.	.	.	.	.	.	.	.	.	.	.	.
0.5	.	.	.	.	.	.	.	.	.	.	.	.
0.6	.	.	.	.	.	.	.	.	.	.	.	.
0.7	.	.	.	.	.	.	.	.	.	.	.	.
0.8	.	.	.	.	.	.	.	.	.	.	.	.
0.9	.	.	.	.	.	.	.	.	.	.	.	.
1.0	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	74	1	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.6 LARGEST HS(M) = 1.9 MEAN TP(SEC) = 3.0 NO. OF CASES = 45.												

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
0.0-0.49	13	.	.	.	.	.	.	.	.	.	.	13
0.5-0.99	17	.	.	.	.	.	.	.	.	.	.	17
1.0-1.49
1.5-1.99
2.0-2.49
2.5-2.99
3.0-3.49
3.5-3.99
4.0-4.49
4.5-4.99
5.0-5.49
5.5-5.99
6.0-6.49
6.5-6.99
7.0-7.49
7.5-7.99
8.0-8.49
8.5-8.99
9.0-9.49
9.5-9.99
TOTAL	31	1	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.0 MEAN TP(SEC) = 2.8 NO. OF CASES = 20.

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
0.0-0.49	35	.	.	.	.	.	.	.	.	.	.	35
0.5-0.99	.	1	.	.	.	.	.	.	.	.	.	.
1.0-1.49
1.5-1.99
2.0-2.49
2.5-2.99
3.0-3.49
3.5-3.99
4.0-4.49
4.5-4.99
5.0-5.49
5.5-5.99
6.0-6.49
6.5-6.99
7.0-7.49
7.5-7.99
8.0-8.49
8.5-8.99
9.0-9.49
9.5-9.99
TOTAL	8	1	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.5 LARGEST HS(M) = 1.3 MEAN TP(SEC) = 3.0 NO. OF CASES = 6.

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
0.0-0.49	5	.	.	.	.	.	.	.	.	.	.	5
0.5-0.99	1	.	.	.	.	.	.	.	.	.	.	1
1.0-1.49
1.5-1.99
2.0-2.49
2.5-2.99
3.0-3.49
3.5-3.99
4.0-4.49
4.5-4.99
5.0-5.49
5.5-5.99
6.0-6.49
6.5-6.99
7.0-7.49
7.5-7.99
8.0-8.49
8.5-8.99
9.0-9.49
9.5-9.99
TOTAL	6	4	0	3	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.1 LARGEST HS(M) = 1.9 MEAN TP(SEC) = 5.0 NO. OF CASES = 9.

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	
0.0-0.49	6	.	.	.	.	.	.	.	.	.	.	6
0.5-0.99	1	.	.	.	.	.	.	.	.	.	.	1
1.0-1.49
1.5-1.99
2.0-2.49
2.5-2.99
3.0-3.49
3.5-3.99
4.0-4.49
4.5-4.99
5.0-5.49
5.5-5.99
6.0-6.49
6.5-6.99
7.0-7.49
7.5-7.99
8.0-8.49
8.5-8.99
9.0-9.49
9.5-9.99
TOTAL	7	0	3	1	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.7 LARGEST HS(M) = 1.6 MEAN TP(SEC) = 3.9 NO. OF CASES = 8.

[illegible][illegible][illegible]

HEIGHT(METERS)				PERIOD(SECONDS)										TOTAL	
				<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0	0	0	0	23	1	3	5	1	1						34
1	1	1	1	16			3	37	6						90
2	2	2	2		3		5	68	4						201
3	3	3	3			1	8	44	3	11					154
4	4	4	4				2	17	2	27					74
5	5	5	5				1	5		15					30
6	6	6	6							8					8
7	7	7	7								18				18
8	8	8	8												0
9	9	9	9												0
10	10	10	10												0
11	11	11	11												0
12	12	12	12												0
13	13	13	13												0
14	14	14	14												0
15	15	15	15												0
16	16	16	16												0
17	17	17	17												0
18	18	18	18												0
19	19	19	19												0
20	20	20	20												0
21	21	21	21												0
22	22	22	22												0
23	23	23	23												0
24	24	24	24												0
25	25	25	25												0
26	26	26	26												0
27	27	27	27												0
28	28	28	28												0
29	29	29	29												0
30	30	30	30												0
TOTAL	30	9	22	176	172	98	79	23	0	0	0	0	0	0	368
MEAN HS(M) =	1.5	LARGEST HS(M) =	3.6	MEAN TP(SEC) =	9.8	NO. OF CASES =	368								

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	78	496	1928	2946	396	167	35	8				6054
0.5-0.99	44	1170	8057	11860	5706	3783	949	169				31750
1.0-1.49	10	248	4888	3704	4813	7741	4609	679				26733
1.5-1.99		37	1327	1671	1158	3911	6439	2068	11			16720
2.0-2.49			136	713	270	1058	4250	3061	109			9866
2.5-2.99			5	100	18	23	1281	2650	184			4936
3.0-3.49				11		6	222	279	371			1633
3.5-3.99							29	83	71			153
4.0-4.49								3	29			32
TOTAL	132	1951	16341	21005	12467	16806	17814	9980	1208	1	0	
MEAN HS(M) =	1.3	LARGEST HS(M) =	5.0	MEAN TP(SEC) =	10.3	NO. OF CASES =	57119.					

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	83		3	2								83
0.5-0.99	47			10								57
1.0-1.49	1			11								12
1.5-1.99					8							8
2.0-2.49					5							5
2.5-2.99						10						10
3.0-3.49						5						5
3.5-3.99							1					1
4.0-4.49								1				1
TOTAL	136	0	3	27	19	18	1	2	0	0	0	
MEAN HS(M) =	0.8	LARGEST HS(M) =	2.3	MEAN TP(SEC) =	5.1	NO. OF CASES =	126.					

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	135											135
0.5-0.99	63											63
1.0-1.49		1		1								2
1.5-1.99												
2.0-2.49												
2.5-2.99												
3.0-3.49												
3.5-3.99												
4.0-4.49												
TOTAL	199	4	0	2	0	0	0	0	0	0	0	
MEAN HS(M) =	0.4	LARGEST HS(M) =	2.4	MEAN TP(SEC) =	2.7	NO. OF CASES =	122.					

STATION 27 34.33N 119.92W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

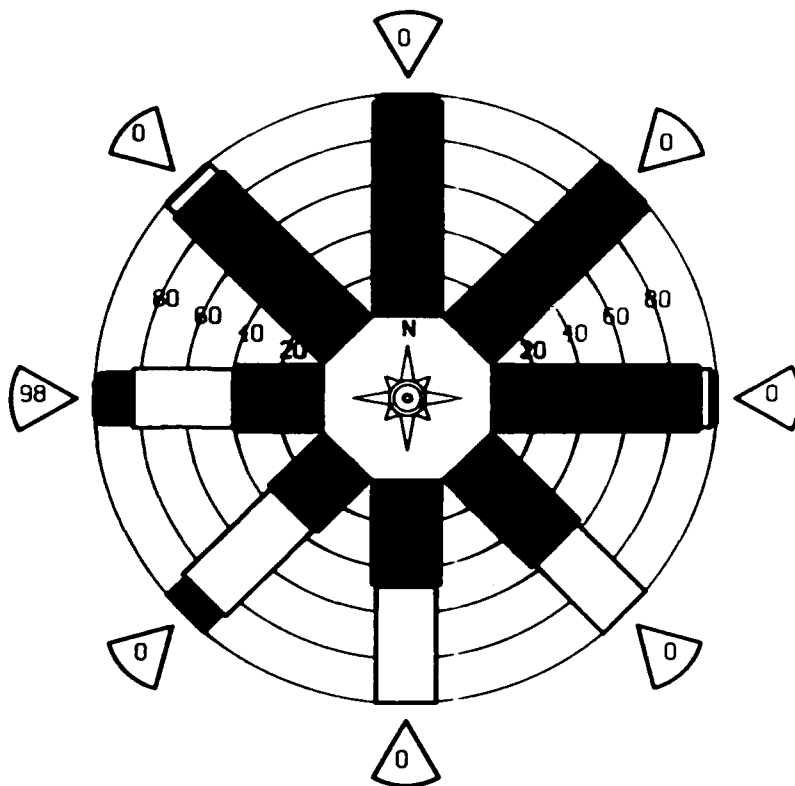
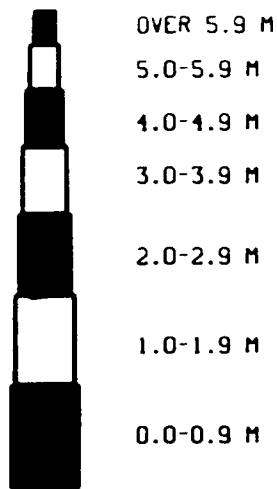
HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	155											155
0.5-0.99	47											47
1.0-1.49		1										1
1.5-1.99		6										6
2.0-2.49												
2.5-2.99												
3.0-3.49												
3.5-3.99												
4.0-4.49												
TOTAL	202	7	0	0	0	0	0	0	0	0	0	
MEAN HS(M) =	0.4	LARGEST HS(M) =	2.3	MEAN TP(SEC) =	2.6	NO. OF CASES =	124.					

STATION 27 34.33N 119.92W FOR ALL DIRECTIONS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.9	100	49	193	295	39	16	3					695
1.0-1.9	55	117	806	1189	574	379	96	16	1			3233
2.0-2.9	2	25	490	380	490	777	68	68	14			2696
3.0-3.9		6	133	174	122	395	460	207	10			1693
4.0-4.9		1	13	73	29	109	427	306	18			976
5.0-5.9				10	11	12	130	265	28			456
6.0-6.9				1	1	2	23	98	37			162
7.0-7.9							2	29	10			41
8.0-8.9								8	7			15
9.0-9.9									2			2
TOTAL	157	198	1635	2122	1266	1690	1787	997	117	0	0	58440

MEAN HS(M) = 1.3 LARGEST HS(M) = 5.0 MEAN TP(SEC) = 10.2 TOTAL CASES = 58440.

STATION 27
 34.33N, 119.92W
 58440 CASES



MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1956	1.7	1.6	1.3	1.2	1.2	1.1	0.8	0.9	0.6	0.8	1.1	1.5	1.1
1957	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1958	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1959	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1960	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1961	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1962	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1963	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1964	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1965	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1966	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1967	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1968	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1969	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1970	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1971	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1972	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1973	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1974	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
1975	1.4	1.4	1.4	1.4	1.4	1.1	0.9	0.6	0.6	0.6	1.1	1.4	1.1
MEAN	1.8	1.9	1.6	1.4	1.1	1.0	0.8	0.7	0.8	1.0	1.4	1.9	

MONTH

[illegible]

20 YR. STATISTICS FOR HIS STATION 27 (34.33N 119.92W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.3
MEAN PEAK WAVE PERIOD (SECONDS) =	10.2
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.7
STANDARD DEVIATION OF TP (SECONDS) =	2.6
LARGEST HS (METERS) =	5.0
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	277.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121315

[illegible][illegible][illegible][illegible]

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER
.0	-	.	.	.	.	.	.	.	.	.	.	.
.5	-	.	.	.	.	.	.	.	.	.	.	.
1.0	-	.	.	.	.	.	.	.	.	.	.	.
1.5	-	.	.	.	.	.	.	.	.	.	.	.
2.0	-	.	.	.	.	.	.	.	.	.	.	.
2.5	-	.	.	.	.	.	.	.	.	.	.	.
3.0	-	.	.	.	.	.	.	.	.	.	.	.
3.5	-	.	.	.	.	.	.	.	.	.	.	.
4.0	-	.	.	.	.	.	.	.	.	.	.	.
4.5	-	.	.	.	.	.	.	.	.	.	.	.
5.0	-	.	.	.	.	.	.	.	.	.	.	.
5.5	-	.	.	.	.	.	.	.	.	.	.	.
6.0+	-	.	.	.	.	.	.	.	.	.	.	.
TOTAL		0	0	0	3	0	0	0	0	0	0	0
MEAN HS(M) = 1.7		LARGEST HS(M) = 1.7		MEAN TP(SEC) = 8.7				NO. OF CASES = 2.				

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0.49	3	.	.	.	.	.	.	.	.	.	.
0.5	0.99	.	.	.	.	.	.	.	.	.	.	.
1.0	1.49	.	1	.	.	.	.	.	.	.	.	.
1.5	1.99	.	.	.	.	.	.	.	.	.	.	.
2.0	2.49	.	.	.	.	.	.	.	.	.	.	.
2.5	2.99	.	.	.	.	.	.	.	.	.	.	.
3.0	3.49	.	.	.	.	.	.	.	.	.	.	.
3.5	3.99	.	.	.	.	.	.	.	.	.	.	.
4.0	4.49	.	.	.	.	.	.	.	.	.	.	.
4.5	4.99	.	.	.	.	.	.	.	.	.	.	.
5.0	5.49	.	.	.	.	.	.	.	.	.	.	.
5.5	5.99	.	.	.	.	.	.	.	.	.	.	.
6.0	6.49	.	.	.	.	.	.	.	.	.	.	.
6.5	6.99	.	.	.	.	.	.	.	.	.	.	.
7.0	7.49	.	.	.	.	.	.	.	.	.	.	.
7.5	7.99	.	.	.	.	.	.	.	.	.	.	.
8.0	8.49	.	.	.	.	.	.	.	.	.	.	.
8.5	8.99	.	.	.	.	.	.	.	.	.	.	.
9.0	9.49	.	.	.	.	.	.	.	.	.	.	.
9.5	9.99	.	.	.	.	.	.	.	.	.	.	.
10.0	10.49	.	.	.	.	.	.	.	.	.	.	.
10.5	10.99	.	.	.	.	.	.	.	.	.	.	.
11.0	11.49	.	.	.	.	.	.	.	.	.	.	.
11.5	11.99	.	.	.	.	.	.	.	.	.	.	.
12.0	12.49	.	.	.	.	.	.	.	.	.	.	.
12.5	12.99	.	.	.	.	.	.	.	.	.	.	.
13.0	13.49	.	.	.	.	.	.	.	.	.	.	.
13.5	13.99	.	.	.	.	.	.	.	.	.	.	.
14.0	14.49	.	.	.	.	.	.	.	.	.	.	.
14.5	14.99	.	.	.	.	.	.	.	.	.	.	.
15.0	15.49	.	.	.	.	.	.	.	.	.	.	.
15.5	15.99	.	.	.	.	.	.	.	.	.	.	.
16.0	16.49	.	.	.	.	.	.	.	.	.	.	.
16.5	16.99	.	.	.	.	.	.	.	.	.	.	.
17.0	17.49	.	.	.	.	.	.	.	.	.	.	.
17.5	17.99	.	.	.	.	.	.	.	.	.	.	.
18.0	18.49	.	.	.	.	.	.	.	.	.	.	.
18.5	18.99	.	.	.	.	.	.	.	.	.	.	.
19.0	19.49	.	.	.	.	.	.	.	.	.	.	.
19.5	19.99	.	.	.	.	.	.	.	.	.	.	.
20.0	20.49	.	.	.	.	.	.	.	.	.	.	.
20.5	20.99	.	.	.	.	.	.	.	.	.	.	.
21.0	21.49	.	.	.	.	.	.	.	.	.	.	.
21.5	21.99	.	.	.	.	.	.	.	.	.	.	.
22.0	22.49	.	.										

[illegible][illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)												TOTAL
		<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.0	13	3	1	3	2	5	11	.	.	.	.	.	23
0.1	1			1	1	4	6	.	.	.	.	.	20
0.2	.	6	6	6	7	3		.	.	.	.	.	46
0.3	.	.	.	3	5	11		.	.	.	.	.	40
0.4	.	.	.	13	10	30	32	.	.	.	.	.	110
0.5	.	.	.	.	5	8	17	5	.	.	.	.	86
0.6	.	.	.	.	.	.	1	.	.	.	.	.	38
0.7	.	.	.	.	.	.	.	22	.	.	.	.	24
0.8	.	.	.	.	.	.	.	.	.	.	.	.	99
0.9	.	.	.	.	.	.	.	.	.	.	.	.	22
1.0	.	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	10	17	157	151	88	67	27	0	0	0		322	
MEAN HS(M) =	1.6	LARGEST HS(M) =	3.8	MEAN TP(SEC) =	9.9	NO. OF CASES =	322.							

STATION 28 34.33N 120.12W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	66	352	624	650	65	53	1					1811
0.5-0.99	32	1001	5340	4673	1613	847	219	27	6	5		13763
1.0-1.49	6	304	4827	3631	2484	2708	1055	201	32			15248
1.5-1.99		49	2022	1741	1557	2761	3399	592	32			11153
2.0-2.49			304	1055	1355	1563	3061	1225	51			7654
2.5-2.99			20	266	159	424	1863	1447	39			4218
3.0-3.49				5	3	35	523	1189	77			1912
3.5-3.99						11	111	562	124			816
4.0-4.49							11	160	66			237
4.5-4.99								68	20			88
5.0-5.49								23				31
TOTAL	104	1706	13137	12056	6329	8402	9243	5479	467	8	0	

MEAN HS(M) = 1.5 LARGEST HS(M) = 5.8 MEAN TP(SEC) = 10.0 NO. OF CASES = 33290.

STATION 28 34.33N 120.12W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	37	46	585	1066	88	47	10	8				1887
0.5-0.99	20	39	1634	6647	2154	961	220	53	1			11729
1.0-1.49	5	1	234	1783	3340	3944	1346	225				10883
1.5-1.99			18	154	759	2876	3477	497	5			7801
2.0-2.49			1	13	35	727	2313	1149	20			4306
2.5-2.99						37	1288	1415	143	1		2884
3.0-3.49							227	1160	184			1571
3.5-3.99							1	321	207			529
4.0-4.49								100	107			207
4.5-4.99								15	23			38
5.0-5.49								51				51
TOTAL	62	86	2472	9663	6376	8592	8882	4943	809	1	0	

MEAN HS(M) = 1.4 LARGEST HS(M) = 5.7 MEAN TP(SEC) = 10.9 NO. OF CASES = 24495.

STATION 28 34.33N 120.12W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	46											46
0.5-0.99	27	1	1	6		3						27
1.0-1.49		1										1
1.5-1.99												0
2.0-2.49												0
2.5-2.99												0
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
TOTAL	73	2	1	6	0	4	0	0	0	0	0	

MEAN HS(M) = 0.7 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 3.7 NO. OF CASES = 53.

STATION 28 34.33N 120.12W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

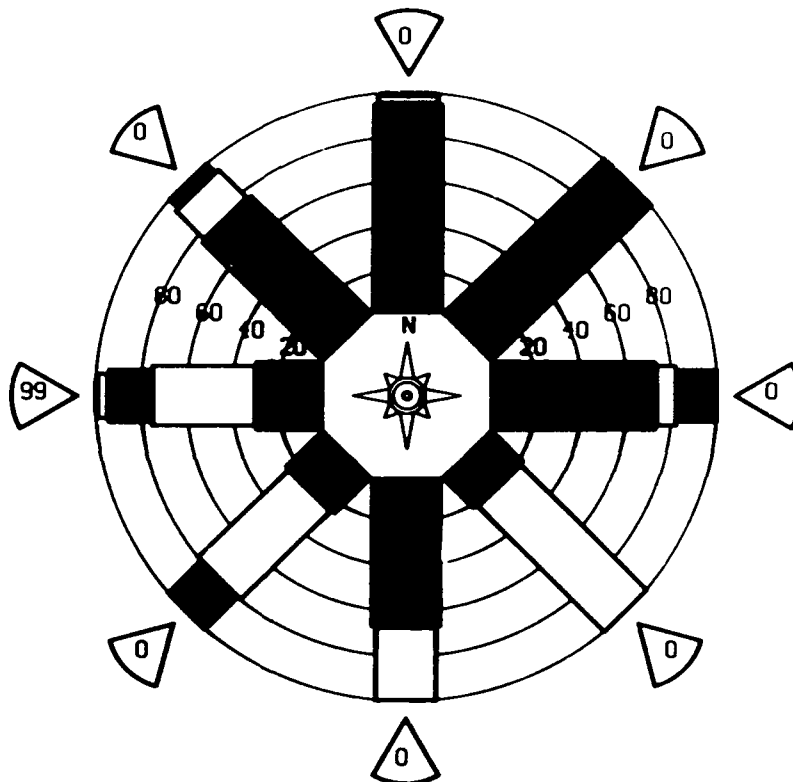
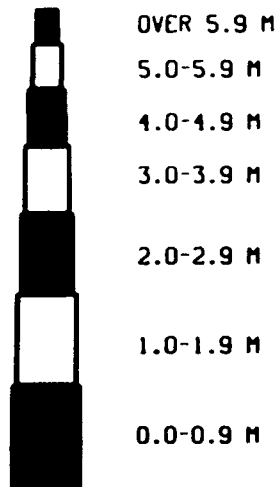
HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	59											59
0.5-0.99	17											17
1.0-1.49		1		1	1							3
1.5-1.99												0
2.0-2.49												0
2.5-2.99												0
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
TOTAL	76	2	0	2	1	0	0	0	0	0	0	

MEAN HS(M) = 0.5 LARGEST HS(M) = 2.3 MEAN TP(SEC) = 3.1 NO. OF CASES = 50.

STATION 28 34.33N 120.12W FOR ALL DIRECTIONS											
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS											
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0-0.49	43	40	121	171	15	10	1	8	.	.	401
0.5-0.99	25	104	697	1133	379	181	45	42	.	.	2572
1.0-1.49	1	31	507	549	587	668	240	109	5	.	2628
1.5-1.99	.	5	204	195	238	540	587	237	3	.	1908
2.0-2.49	.	.	31	108	44	232	316	286	11	.	1203
2.5-2.99	.	.	2	27	16	47	75	234	18	.	712
3.0-3.49	.	.	.	3	5	3	11	90	26	.	346
3.5-3.99	.	.	.	.	.	1	1	26	33	.	135
4.0-4.49	.	.	.	.	.	.	.	8	17	.	44
4.5-4.99	.	.	.	.	.	.	.	.	4	.	12
5.0-5.99+	.	.	.	.	.	.	.	.	7	.	7
TOTAL	69	180	1562	2186	1284	1707	1816	1040	124	0	0
MEAN HS(M) = 1.5	LARGEST HS(M) = 5.8		MEAN TP(SEC) = 10.3				TOTAL CASES = 58440.				

MEAN HS(M) = 1.5 LARGEST HS(M) = 5.8 MEAN TP(SEC) = 10.3 TOTAL CASES = 58440.

STATION 28
34.33N, 120.12W
58440 CASES



MEAN HS (METERS) BY MONTH AND YEAR
WIS STATION 28 (34.33N 120.12W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1957	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1958	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1959	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1960	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1961	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1962	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1963	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1964	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1965	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1966	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1967	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1968	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1969	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1970	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1971	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1972	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1973	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1974	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
1975	1.9	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	1.5
MEAN	2.1	2.2	1.9	1.6	1.3	1.2	0.9	0.8	0.9	1.2	1.7	2.2	

LARGEST HS (METERS) BY MONTH AND YEAR
WIS STATION 28 (34.33N 120.12W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1957	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1958	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1959	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1960	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1961	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1962	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1963	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1964	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1965	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1966	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1967	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1968	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1969	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1970	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1971	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1972	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1973	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1974	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1975	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
MEAN	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	

20 YR. STATISTICS FOR WIS STATION 28 (34.33N 120.12W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.5
MEAN PEAK WAVE PERIOD (SECONDS) =	10.3
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	270.0
STANDARD DEVIATION OF HS (METERS) =	0.8
STANDARD DEVIATION OF TP (SECONDS) =	2.5
LARGEST HS (METERS) =	5.8
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	281.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121318

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.50	20	.	.	.	.	.	.	.	.	.	20
0.45	15	.	.	.	.	.	.	.	.	.	15
0.40	1	.	.	.	.	.	.	.	.	.	1
0.35	.	.	.	.	.	.	.	.	.	.	.
0.30	.	.	.	.	.	.	.	.	.	.	.
0.25	.	.	.	.	.	.	.	.	.	.	.
0.20	.	.	.	.	.	.	.	.	.	.	.
0.15	.	.	.	.	.	.	.	.	.	.	.
0.10	.	.	.	.	.	.	.	.	.	.	.
0.05	.	.	.	.	.	.	.	.	.	.	.
0.00+	.	.	.	.	.	.	.	.	.	.	.
TOTAL	36	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.5 LARGEST HS(M) = 1.0 MEAN TP(SEC) = 2.8 NO. OF CASES = 22.											

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 22.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.50	23	.	.	.	.	.	.	.	.	.	23
0.45	10	.	.	.	.	.	.	.	.	.	10
0.40	.	.	.	.	.	.	.	.	.	.	.
0.35	.	.	.	.	.	.	.	.	.	.	.
0.30	.	.	.	.	.	.	.	.	.	.	.
0.25	.	.	.	.	.	.	.	.	.	.	.
0.20	.	.	.	.	.	.	.	.	.	.	.
0.15	.	.	.	.	.	.	.	.	.	.	.
0.10	.	.	.	.	.	.	.	.	.	.	.
0.05	.	.	.	.	.	.	.	.	.	.	.
0.00+	.	.	.	.	.	.	.	.	.	.	.
TOTAL	33	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.4 LARGEST HS(M) = 0.6 MEAN TP(SEC) = 2.6 NO. OF CASES = 20.											

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 45.0
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.50	8	.	.	.	.	.	.	.	.	.	8
0.45	17	.	.	.	.	.	.	.	.	.	17
0.40	.	.	.	.	.	.	.	.	.	.	.
0.35	.	.	.	.	.	.	.	.	.	.	.
0.30	.	.	.	.	.	.	.	.	.	.	.
0.25	.	.	.	.	.	.	.	.	.	.	.
0.20	.	.	.	.	.	.	.	.	.	.	.
0.15	.	.	.	.	.	.	.	.	.	.	.
0.10	.	.	.	.	.	.	.	.	.	.	.
0.05	.	.	.	.	.	.	.	.	.	.	.
0.00+	.	.	.	.	.	.	.	.	.	.	.
TOTAL	25	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.5 LARGEST HS(M) = 0.7 MEAN TP(SEC) = 3.0 NO. OF CASES = 15.											

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 67.5
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.50	8	.	.	.	.	.	.	.	.	.	8
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00+
TOTAL	8	0	0	1	0	0	0	0	0	0	0
MEAN HS(M) = 1.0 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 4.3 NO. OF CASES = 6.											

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 90.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD(SECONDS)

TOTAL

[illegible]

LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NO. OF CASES = 0.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 112.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD(SECONDS)

TOTAL

[illegible]

LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NO. OF CASES = 0.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 135.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD(SECONDS)

TOTAL

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	1	5	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
0	0	0	1	5	0	0	0	0	0	0

LARGEST HS(M) = 2.7 MEAN TP(SEC) = 9.8 NO. OF CASES = 4.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 157.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

PERIOD(SECONDS)

TOTAL

<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
1	.	.	.	.	.	.	.	.	.	.
.	.	.	1	.	.	.	.	.	.	.
.	.	1	1	5	1	.	.	.	.	.
.
.
1	0	1	2	5	1	0	0	0	0	0

LARGEST HS(M) = 2.7 MEAN TP(SEC) = 8.7 NO. OF CASES = 8.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 180.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER
0.0	1	.	.	1	.	.	.	.	.	.	1
0.1	.	.	.	1	.	.	.	.	.	.	0
0.2	.	.	.	1	.	.	.	.	.	.	0
0.3	.	.	.	1	.	.	.	.	.	.	0
0.4	.	.	.	1	.	.	.	.	.	.	0
0.5	.	.	.	1	.	.	.	.	.	.	0
0.6	.	.	.	1	.	.	.	.	.	.	0
0.7	.	.	.	1	.	.	.	.	.	.	0
0.8	.	.	.	1	.	.	.	.	.	.	0
0.9	.	.	.	1	.	.	.	.	.	.	0
1.0	.	.	.	1	.	.	.	.	.	.	0
1.1	.	.	.	1	.	.	.	.	.	.	0
1.2	.	.	.	1	.	.	.	.	.	.	0
1.3	.	.	.	1	.	.	.	.	.	.	0
1.4	.	.	.	1	.	.	.	.	.	.	0
1.5	.	.	.	1	.	.	.	.	.	.	0
1.6	.	.	.	1	.	.	.	.	.	.	0
1.7	.	.	.	1	.	.	.	.	.	.	0
1.8	.	.	.	1	.	.	.	.	.	.	0
1.9	.	.	.	1	.	.	.	.	.	.	0
2.0	.	.	.	1	.	.	.	.	.	.	0
2.1	.	.	.	1	.	.	.	.	.	.	0
2.2	.	.	.	1	.	.	.	.	.	.	0
2.3	.	.	.	1	.	.	.	.	.	.	0
2.4	.	.	.	1	.	.	.	.	.	.	0
2.5	.	.	.	1	.	.	.	.	.	.	0
2.6	.	.	.	1	.	.	.	.	.	.	0
2.7	.	.	.	1	.	.	.	.	.	.	0
2.8	.	.	.	1	.	.	.	.	.	.	0
2.9	.	.	.	1	.	.	.	.	.	.	0
3.0	.	.	.	1	.	.	.	.	.	.	0
3.1	.	.	.	1	.	.	.	.	.	.	0
3.2	.	.	.	1	.	.	.	.	.	.	0
3.3	.	.	.	1	.	.	.	.	.	.	0
3.4	.	.	.	1	.	.	.	.	.	.	0
3.5	.	.	.	1	.	.	.	.	.	.	0
3.6	.	.	.	1	.	.	.	.	.	.	0
3.7	.	.	.	1	.	.	.	.	.	.	0
3.8	.	.	.	1	.	.	.	.	.	.	0
3.9	.	.	.	1	.	.	.	.	.	.	0
4.0	.	.	.	1	.	.	.	.	.	.	0
4.1	.	.	.	1	.	.	.	.	.	.	0
4.2	.	.	.	1	.	.	.	.	.	.	0
4.3	.	.	.	1	.	.	.	.	.	.	0
4.4	.	.	.	1	.	.	.	.	.	.	0
4.5	.	.	.	1	.	.	.	.	.	.	0
4.6	.	.	.	1	.	.	.	.	.	.	0
4.7	.	.	.	1	.	.	.	.	.	.	0
4.8	.	.	.	1	.	.	.	.	.	.	0
4.9	.	.	.	1	.	.	.	.	.	.	0
5.0	.	.	.	1	.	.	.	.	.	.	0
5.1	.	.	.	1	.	.	.	.	.	.	0
5.2	.	.	.	1	.	.	.	.	.	.	0
5.3	.	.	.	1	.	.	.	.	.	.	0
5.4	.	.	.	1	.	.	.	.	.	.	0
5.5	.	.	.	1	.	.	.	.	.	.	0
5.6	.	.	.	1	.	.	.	.	.	.	0
5.7	.	.	.	1	.	.	.	.	.	.	0
5.8	.	.	.	1	.	.	.	.	.	.	0
5.9	.	.	.	1	.	.	.	.	.	.	0
6.0	.	.	.	1	.	.	.	.	.	.	0
6.1	.	.	.	1	.	.	.	.	.	.	0
6.2	.	.	.	1	.	.	.	.	.	.	0
6.3	.	.	.	1	.	.	.	.	.	.	0
6.4	.	.	.	1	.	.	.	.	.	.	0
6.5	.	.	.	1	.	.	.	.	.	.	0
6.6	.	.	.	1	.	.	.	.	.	.	0
6.7	.	.	.	1	.	.	.	.	.	.	0
6.8	.	.	.	1	.	.	.	.	.	.	0
6.9	.	.	.	1	.	.	.	.	.	.	0
7.0	.	.	.	1	.	.	.	.	.	.	0
7.1	.	.	.	1	.	.	.	.	.	.	0
7.2	.	.	.	1	.	.	.	.	.	.	0
7.3	.	.	.	1	.	.	.	.	.	.	0
7.4	.	.	.	1	.	.	.	.	.	.	0
7.5	.	.	.	1	.	.	.	.	.	.	0
7.6	.	.	.	1	.	.	.	.	.	.	0
7.7	.	.	.	1	.	.	.	.	.	.	0
7.8	.	.	.	1	.	.	.	.	.	.	0
7.9	.	.	.	1	.	.	.	.	.	.	0
8.0	.	.	.	1	.	.	.	.	.	.	0
8.1	.	.	.	1	.	.	.	.	.	.	0
8.2	.	.	.	1	.	.	.	.	.	.	0
8.3	.	.	.	1	.	.	.	.	.	.	0
8.4	.	.	.	1	.	.	.	.	.	.	0
8.5	.	.	.	1	.	.	.	.	.	.	0
8.6	.	.	.	1	.	.	.	.	.	.	0
8.7	.	.	.	1	.	.	.	.	.	.	0
8.8	.	.	.	1	.	.	.	.	.	.	0
8.9	.	.	.	1	.	.	.	.	.	.	0
9.0	.	.	.	1	.	.	.	.	.	.	0
9.1	.	.	.	1	.	.	.	.	.	.	0
9.2	.	.	.	1	.	.	.	.	.	.	0
9.3	.	.	.	1	.	.	.	.	.	.	0
9.4	.	.	.	1	.	.	.	.	.	.	0
9.5	.	.	.	1	.	.	.	.	.	.	0
9.6	.	.	.	1	.	.	.	.	.	.	0
9.7	.	.	.	1	.	.	.	.	.	.	0
9.8	.	.	.	1	.	.	.	.	.	.	0
9.9	.	.	.	1	.	.	.	.	.	.	0
10.0	.	.	.	1	.	.	.	.	.	.	0
10.1	.	.	.	1	.	.	.	.	.	.	0
10.2	.	.	.	1	.	.	.	.	.	.	0
10.3	.	.	.	1	.	.	.	.	.	.	0
10.4	.	.	.	1	.	.	.	.	.	.	0
10.5	.	.	.	1	.	.	.	.	.	.	0
10.6	.	.	.	1	.	.	.	.	.	.	0
10.7	.	.	.	1	.	.	.	.	.	.	0
10.8	.	.	.	1	.	.	.	.	.	.	0
10.9	.	.	.	1	.	.	.	.	.	.	0
11.0	.	.	.	1	.	.	.	.	.	.	0
11.1	.	.	.	1	.	.	.	.	.	.	0
11.2	.	.	.	1	.	.	.	.	.	.	0
11.3	.	.	.	1	.	.	.	.	.	.	0
11.4	.	.	.	1	.	.	.	.	.	.	0
11.5	.	.	.	1	.	.	.	.	.	.	0
11.6	.	.	.	1	.	.	.	.	.	.	0
11.7	.	.	.	1	.	.	.	.	.	.	0
11.8	.	.	.	1	.	.	.	.	.	.	0
11.9	.	.	.	1	.	.	.	.	.	.	0
12.0	.	.	.	1	.	.	.	.	.	.	0
12.1	.	.	.	1	.	.	.	.	.	.	0
12.2	.	.	.	1	.	.	.	.	.	.	0
12.3	.	.	.	1	.	.	.	.	.	.	0
12.4	.	.	.	1	.	.	.	.	.	.	0
12.5	.	.	.	1	.	.	.	.	.	.	0
12.6	.	.	.	1	.	.	.	.	.	.	0
12.7	.	.	.	1	.	.	.	.	.	.	0
12.8	.	.	.	1	.	.	.	.	.	.	0
12.9	.	.	.	1	.	.	.	.	.	.	0
13.0	.	.	.	1	.	.	.	.	.	.	0
13.1	.	.	.	1	.	.	.	.	.	.	0
13.2	.	.	.	1	.	.	.	.	.	.	0
13.3	.	.	.	1	.	.	.	.	.	.	0
13.4	.	.	.	1	.	.	.	.	.	.	0
13.5	.	.	.	1	.	.	.	.	.	.	0
13.6	.	.	.	1	.	.	.	.	.	.	0
13.7	.	.	.	1	.	.	.	.	.	.	0
13.8	.	.	.	1	.	.	.	.	.	.	0
13.9	.	.	.	1	.	.	.	.	.	.	0
14.0	.	.	.	1	.	.	.	.	.	.	0
14.1	.	.	.	1	.	.	.	.	.	.	0
14.2	.	.	.	1	.	.	.	.	.	.	0
14.3	.	.	.	1	.	.	.	.	.	.	0
14.4	.	.	.	1	.	.	.	.	.	.	0
14.5	.	.	.	1	.	.	.	.	.	.	0
14.6	.	.	.	1	.	.	.	.	.	.	0
14.7	.	.	.	1	.	.	.	.	.	.	0
14.8	.	.	.	1	.	.	.	.	.	.	0
14.9	.	.	.	1	.	.	.	.	.	.	0
15.0	.	.	.	1	.	.	.	.	.	.	0
15.1	.	.	.	1	.	.	.	.	.	.	0
15.2	.	.	.	1	.	.	.	.	.	.	0
15.3	.	.	.	1	.	.	.	.	.	.	0
15.4	.	.	.	1	.	.	.	.	.	.	0
15.5	.	.	.	1	.	.	.	.	.	.	0
15.6	.	.	.	1	.	.	.	.	.	.	0
15.7	.	.	.	1	.	.	.	.	.	.	0
15.8	.	.	.	1	.	.	.	.	.	.	0
15.9	.	.	.	1	.	.	.	.	.	.	0
16.0	.	.	.	1	.	.	.	.	.	.	0
16.1	.	.	.	1	.	.	.	.	.	.	0
16.2	.	.	.	1	.	.	.	.	.	.	0
16.3	.	.	.	1	.	.	.	.	.	.	0
16.4	.	.	.	1	.	.	.	.	.	.	0
16.5	.	.	.	1	.	.	.	.	.	.	0
16.6	.	.	.	1	.	.	.	.	.	.	0
16.7	.	.	.	1	.	.	.	.	.	.	0
16.8	.	.	.	1	.	.	.	.	.	.	0
16.9	.	.	.	1	.	.	.	.	.	.	0
17.0	.	.	.	1	.	.	.	.	.	.	0
17.1	.	.	.	1	.	.	.	.	.	.	0
17.2	.	.	.	1	.	.	.	.	.	.	0
17.3	.	.	.	1	.	.	.	.	.	.	0
17.4	.	.	.	1	.	.	.	.	.	.	0
17.5	.	.	.	1	.	.	.	.	.	.	0
17.6	.	.	.	1	.	.	.	.	.	.	0
17.7	.	.	.	1	.	.	.	.	.	.	0
17.8	.	.	.	1	.	.	.	.	.	.	0
17.9	.	.	.	1	.	.	.	.	.	.	0
18.0	.	.	.	1	.	.	.	.	.	.	0
18.1	.	.	.	1	.	.	.	.	.	.	0
18.2	.	.	.	1	.	.	.	.	.	.	0
18.3	.	.	.	1	.	.	.	.	.	.	0
18.4	.	.	.	1	.	.	.	.	.	.	0
18.5	.	.	.	1	.	.	.	.	.	.	0
18.6	.	.	.	1	.	.	.	.	.	.	0
18.7	.	.	.	1	.	.	.	.	.	.	0
18.8	.	.	.	1	.	.	.	.	.	.	0
18.9	.	.	.	1	.	.	.	.	.	.	0
19.0	.	.	.	1	.	.	.	.	.	.	0
19.1	.	.	.	1	.	.	.	.	.	.	0

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 270.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	25	68	56	116	13	20	11	.	.	.	.	278
0.5-0.99	1	296	626	790	373	212	66	13	1	.	.	2337
1.0-1.49	.	181	1120	746	646	506	189	66	13	1	.	3471
1.5-1.99	.	63	1137	607	429	862	645	162	17	.	.	3922
2.0-2.49	.	.	545	470	362	805	980	297	5	.	.	3464
2.5-2.99	.	.	61	402	111	450	1178	407	6	.	.	2615
3.0-3.49	.	.	10	114	92	744	403	17	.	.	.	1539
3.5-3.99	.	.	.	18	25	53	347	472	15	.	.	930
4.0-4.49	.	.	.	5	10	5	51	265	18	.	.	354
4.5-4.99	.	.	.	.	.	.	23	77	39	.	.	139
5.0-5.49	.	.	.	.	.	.	30	30	30	.	.	60
TOTAL	34	608	3555	3268	2048	3065	4177	2190	160	4	0	

MEAN HS(M) = 2.0 LARGEST HS(M) = 6.0 MEAN TP(SEC) = 10.4 NO. OF CASES = 11187.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 292.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	41	92	337	422	22	32	11	10	.	.	.	967
0.5-0.99	39	610	4000	6329	1144	338	135	22	3	1	.	12621
1.0-1.49	6	462	3718	7561	4065	2761	651	147	13	3	.	19387
1.5-1.99	.	133	2067	2941	4038	5650	2457	374	22	3	.	17685
2.0-2.49	.	.	185	848	1185	3444	4151	807	41	1	.	11262
2.5-2.99	.	.	152	484	210	1476	3692	1666	97	.	.	7777
3.0-3.49	.	.	6	142	59	284	2111	2079	114	1	.	4796
3.5-3.99	.	.	1	25	25	18	722	1798	217	.	.	2806
4.0-4.49	.	.	.	8	11	.	100	1054	200	.	.	1373
4.5-4.99	.	.	.	.	.	.	17	371	294	.	.	682
5.0-5.49	.	.	.	.	.	.	195	225	225	.	.	420
TOTAL	86	1297	11066	18760	10759	14003	14047	8523	1226	9	0	

MEAN HS(M) = 1.8 LARGEST HS(M) = 7.0 MEAN TP(SEC) = 10.4 NO. OF CASES = 46643.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 315.0
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	10	.	.	.	.	.	.	.	.	.	.	10
0.5-0.99	13	.	.	.	.	.	.	.	.	.	.	13
1.0-1.49	.	.	.	1	1	3	.	.	.	.	.	5
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.	3
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.	3
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	3
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	3
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	3
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	3
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	3
5.0-5.49	.	.	.	.	.	.	.	.	.	.	.	3
TOTAL	23	0	0	1	1	3	0	0	0	0	0	

MEAN HS(M) = 0.8 LARGEST HS(M) = 2.2 MEAN TP(SEC) = 4.7 NO. OF CASES = 18.

STATION 29 34.33N 120.32W AZIMUTH(DEGREES) = 337.5
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	15	.	.	.	.	.	.	.	.	.	.	15
0.5-0.99	11	.	.	.	.	.	.	.	.	.	.	11
1.0-1.49	.	.	.	.	.	.	.	.	.	.	.	3
1.5-1.99	.	.	.	.	.	.	.	.	.	.	.	3
2.0-2.49	.	.	.	.	.	.	.	.	.	.	.	3
2.5-2.99	.	.	.	.	.	.	.	.	.	.	.	3
3.0-3.49	.	.	.	.	.	.	.	.	.	.	.	3
3.5-3.99	.	.	.	.	.	.	.	.	.	.	.	3
4.0-4.49	.	.	.	.	.	.	.	.	.	.	.	3
4.5-4.99	.	.	.	.	.	.	.	.	.	.	.	3
5.0-5.49	.	.	.	.	.	.	.	.	.	.	.	3
TOTAL	26	0	0	0	0	0	0	0	0	0	0	

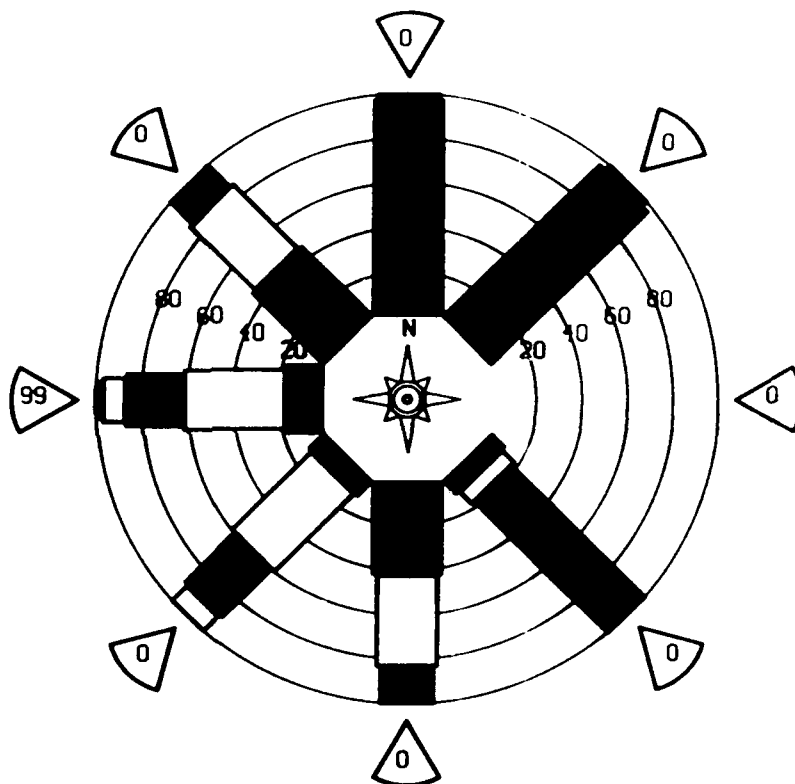
MEAN HS(M) = 0.4 LARGEST HS(M) = 0.7 MEAN TP(SEC) = 2.9 NO. OF CASES = 16.

STATION 29 34.33N 120.32W FOR ALL DIRECTIONS													TOTAL	
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS														
HEIGHT(METERS)	PERIOD(SECONDS)													
	<4.4	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER			
0.0-0.49	16	16	39	53	2	4	1	1	.	.	.	132		
0.50-0.99	12	90	44	71	15	32	15	21	.	.	.	1504		
1.00-1.49	1	64	33	33	47	57	84	53	.	.	.	2299		
1.50-1.99	.	20	34	37	33	28	51	111	.	.	.	2181		
2.00-2.49	.	.	21	22	15	19	51	207	.	.	.	1488		
2.50-2.99	.	.	1	6	15	25	48	248	10	.	.	1049		
3.00-3.49	.	.	.	4	2	7	89	227	33	.	.	637		
3.50-3.99	.	.	.	1	2	1	107	133	33	.	.	172		
4.00-4.49	.	.	.	.	.	.	15	46	5	.	.	83	
4.50-4.99	.	.	.	.	.	.	4	22	5	.	.	47	
5.00+	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	29	190	1467	2226	1298	1720	1829	1072	134	0	0			
MEAN HS(M) = 1.9 LARGEST HS(M) = 7.0 MEAN TP(SEC) = 10.4 TOTAL CASES = 58440.														

STATION 29
34.33N, 120.32W
58440 CASES



OVER 5.9 M
5.0-5.9 M
4.0-4.9 M
3.0-3.9 M
2.0-2.9 M
1.0-1.9 M
0.0-0.9 M



MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR HIS STATION 29 (34.33N 120.32W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) =	1.9
MEAN PEAK WAVE PERIOD (SECONDS) =	10.4
MOST FREQUENT 22.5 (CENTER) DIRECTION BAND (DEGREES) =	292.5
STANDARD DEVIATION OF HS (METERS) =	0.9
STANDARD DEVIATION OF TP (SECONDS) =	2.4
LARGEST HS (METERS) =	7.0
TP (SECONDS) ASSOCIATED WITH THE LARGEST HS =	16.7
AVERAGE DIRECTION (DEGREES) ASSOCIATED WITH THE LARGEST HS =	286.0
DATE OF LARGEST HS OCCURRENCE WAS (YR,MO,DA,HR)	69121318

Waterways Experiment Station Cataloging-in-Publication Data

Jensen, R. E.

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Includes bibliographical references.

1. Ocean waves — Pacific Coast (Calif.) — Statistics. 2. Wind waves — Pacific Coast (Calif.) — Statistics. 3. Oceanography — Pacific Coast (Calif.) — Statistics. 4. Water waves — Pacific Coast (Calif.) — Statistics. I. Jensen, Robert E. II. United States. Army. Corps of Engineers. III. Coastal Engineering Research Center (U.S.) IV. U.S. Army Engineer Waterways Experiment Station. V. Wave Information Studies of US Coastlines.

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